Logon

*** It is now 1/26/08 8:42:58 AM ***

Welcome to DialogLink - Version 5
Revolutionize the Way You Work!

New on Dialog

New Chinese Patent Data in Derwent World Patents Index

Effective November 1, 2007, English-language translations for Chinese Utility Model registrations are now available in *Derwent World Patents Index First View* on *Dialog* (File 331) and *Derwent World Patents Index (DWPI)* (File 350, 351,352), beginning with records published on October 3, 2007.

All Chinese Utility Model registration records in *Derwent World Patents Index First View*SM feature:

- Bibliographic fields including patent number, filing date, IPCs, inventor and assignee names
- Patentee code
- English translation of the author's title, abstract and first claim (all records are human translated)

The Utility numbers will be formatted as follows:

CN20NNNNNNNY

20 = IP right (indicating a utility model) followed by 7-digit serial no. Utility Models have the status Y

DialogLink 5 Release Notes

New features available in the latest release of DialogLink 5 (August 2006)

- Ability to resize images for easier incorporation into DialogLink Reports
- New settings allow users to be prompted to save Dialog search sessions in the format of their choice (Microsoft Word, RTF, PDF, HTML, or TEXT)
- Ability to set up Dialog Alerts by Chemical Structures and the addition of Index Chemicus as a structure searchable database
- Support for connections to STN Germany and STN Japan services

Show Preferences for details

? Help Log On Msg

*** ANNOUNCEMENTS ***

***

***The 2008 EMTREE Thesaurus has been added to EMBASE (Files 72, 73, 772, and 972)

NEW FILES RELEASED

***Trademarkscan - South Korea (File 655)

RESUMED UPDATING

***File 154 & F155, MEDLINE

***File 156, ToxFile

***

RELOADS COMPLETED

***Files 72 & 73, EMBASE

***Files 340, 341 & 942, CLAIMS/U.S. Patents - 2006 reload now online

***

NEWS

Chemical Structure Searching now available in Prous Science Drug Data Report (F452), Prous Science Drugs of the Future (F453), IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus (File 302).

***

>>>For the latest news about Dialog products, services, content<<<

>>>and events, please visit What's New from Dialog at <<<

>>>http://www.dialog.com/whatsnew/. You can find news about<<<

>>>a specific database by entering HELP NEWS <file number>.<<<

? Help Off Line

* * *

Connecting to Rob Pond - Dialog - 264751

Connected to Dialog via SMS003055

```
?  B 15, 9, 610, 810, 275, 476, 624, 621, 636, 613, 813, 16, 160, 634, 148, 20, 35, 583,
65, 2, 474, 475, 99, 256, 348, 349, 347, 635, 570, PAPERSMJ, PAPERSEU, 47
```

[File 35] Dissertation Abs Online 1861-2007/Oct

[File 583] Gale Group Globalbase(TM) 1986-2002/Dec 13

File 583: This file is no longer updating as of 12-13-2002.

[File 65] Inside Conferences 1993-2008/Jan 25

[File 2] INSPEC 1898-2008/Dec W4

[File 474] New York Times Abs 1969-2008/Jan 25

[File 475] Wall Street Journal Abs 1973-2008/Jan 26

[File 99] Wilson Appl. Sci & Tech Abs 1983-2007/Nov

[File 256] TecInfoSource 82-2008/Oct

[File 348] EUROPEAN PATENTS 1978-2007/ 200804

File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.

[File 349] PCT FULLTEXT 1979-2008/UB=20080117UT=20080110

File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.

[File 347] JAPIO Dec 1976-2007/Sep(Updated 080116)

[File 635] Business Dateline(R) 1985-2008/Jan 24

[File 570] Gale Group MARS(R) 1984-2008/Jan 24

[File 387] The Denver Post 1994-2008/Jan 25

[File 471] New York Times Fulltext 1980-2008/Jan 30

[File 492] Arizona Repub/Phoenix Gaz 19862002/Jan 06

File 492: File 492 is closed (no longer updating). Use Newsroom, Files 989 and 990, for current records.

[File 494] St LouisPost-Dispatch 1988-2008/Jan 25

[File 631] Boston Globe 1980-2008/Jan 25

[File 633] Phil.Inquirer 1983-2008/Jan 25

[File 638] Newsday/New York Newsday 1987-2008/Jan 25

[File 640] San Francisco Chronicle 1988-2008/Jan 25

[File 641] Rocky Mountain News Jun 1989-2008/Jan 26

[File 702] Miami Herald 1983-2008/Jan 13

[File 703] USA Today 1989-2008/Jan 25

[File 704] (Portland)The Oregonian 1989-2008/Jan 24

[File 713] Atlanta J/Const. 1989-2008/Jan 24

[File 714] (Baltimore) The Sun 1990-2008/Jan 25

[File 715] Christian Sci.Mon. 1989-2008/Jan 22

[File 725] (Cleveland)Plain Dealer Aug 1991-2008/Jan 25

[File 735] St. Petersburg Times 1989- 2008/Jan 25

[File 477] Irish Times 1999-2008/Jan 25

[File 710] Times/Sun.Times(London) Jun 1988-2008/Jan 26

[File 711] Independent(London) Sep 1988-2006/Dec 12

**File 711: Use File 757 for full current day's news of the Independent, as as well as full coverage of many additional European news sources.*

[File 756] Daily/Sunday Telegraph 2000-2008/Jan 25

[File 757] Mirror Publications/Independent Newspapers 2000-2008/Jan 26

```
?  S (GROUP OR POOL OR AGGREGAT???)(N)(BUY??? OR SHOP???? OR PURCHAS???)
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
     28336816   GROUP
      1886920   POOL
      1641673   AGGREGAT???
     14351817   BUY???
      7592590   SHOP????
     11780388   PURCHAS???
S1     163280   S (GROUP OR POOL OR AGGREGAT???)(N)(BUY??? OR SHOP???? OR PURCHAS???)

?  S PD<20001016
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
```

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

>>>W: One or more prefixes are unsupported

  or undefined in one or more files.

S2   79831589   S PD<20001016

? S (TOTAL???? OR TALL???? or aggregate or aggregated or aggregrates or aggregating or aggregation)(3N)(PROFIT OR PROFITS or ((net or gross)(w)(margin or margins)))

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

19665088	TOTAL????
1738209	TALL????
1096244	AGGREGATE
142176	AGGREGATED
158	AGGREGRATES
102174	AGGREGATING
237872	AGGREGATION
7368570	PROFIT
5328114	PROFITS
12926283	NET
3626542	GROSS
2476266	MARGIN
2039779	MARGINS
660843	(NET OR GROSS)(W)(MARGIN OR MARGINS)

S3 177526 S (TOTAL???? OR TALL???? OR AGGREGATE OR AGGREGATED OR AGGREGRATES OR AGGREGATING OR AGGREGATION)(3N)(PROFIT OR PROFITS OR ((NET OR GROSS)(W)(MARGIN OR MARGINS)))

? d s

Set	Items	Description
S1	163280	S (GROUP OR POOL OR AGGREGAT???)(N)(BUY??? OR SHOP???? OR PURCHAS???)
S2	79831589	S PD<20001016
S3	177526	S (TOTAL???? OR TALL???? OR AGGREGATE OR AGGREGATED OR AGGREGRATES OR AGGREGATING OR AGGREGATION)(3N)(PROFIT OR PROFITS OR ((NET OR GROSS)(W)(MARGIN OR MARGINS)))

? S (MAXIMIZE OR MAXIMIZES OR MAXIMIZED OR MAXIMIZING OR MAXIMUM OR MAXIMALLY OR BEST OR HIGHEST OR MOST)(3N)(PROFIT OR PROFITS OR PROFITABILITY or((NET OR GROSS)(W)(MARGIN OR MARGINS)))

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

```
      1066415   MAXIMIZE
       123647   MAXIMIZES
        86705   MAXIMIZED
       356116   MAXIMIZING
      3680625   MAXIMUM
        31381   MAXIMALLY
     18528807   BEST
      4851805   HIGHEST
     35028579   MOST
      7368570   PROFIT
      5328114   PROFITS
      2142810   PROFITABILITY
     12926283   NET
      3626542   GROSS
      2476266   MARGIN
      2039779   MARGINS
       660843   (NET OR GROSS)(W)(MARGIN OR MARGINS)

S4     233382   S (MAXIMIZE OR MAXIMIZES OR MAXIMIZED OR MAXIMIZING OR MAXIMUM OR
MAXIMALLY OR BEST OR HIGHEST OR MOST)(3N)(PROFIT OR PROFITS OR PROFITABILITY OR((NET OR
GROSS)(W)(MARGIN OR MARGINS)))


?

?  S (optimize OR optimizes OR optIMIZED OR optIMIZING OR optIMUM OR
optIMALLY)(3N)(PROFIT OR PROFITS OR PROFITABILITY OR((NET OR GROSS)(W)(MARGIN OR
MARGINS)))
```

Processing

Processing

Processing

Processing

Processing

Processing

	784567	OPTIMIZE
	113314	OPTIMIZES
	685795	OPTIMIZED
	333874	OPTIMIZING
	773792	OPTIMUM
	133878	OPTIMALLY
	7368570	PROFIT
	5328114	PROFITS
	2142810	PROFITABILITY
	12926283	NET
	3626542	GROSS
	2476266	MARGIN
	2039779	MARGINS
	660843	(NET OR GROSS)(W)(MARGIN OR MARGINS)

S5 14094 S (OPTIMIZE OR OPTIMIZES OR OPTIMIZED OR OPTIMIZING OR OPTIMUM OR OPTIMALLY)(3N)(PROFIT OR PROFITS OR PROFITABILITY OR((NET OR GROSS)(W)(MARGIN OR MARGINS)))

? d s

Set	Items	Description
S1	163280	S (GROUP OR POOL OR AGGREGAT???)(N)(BUY??? OR SHOP???? OR PURCHAS???)
S2	79831589	S PD<20001016
S3	177526	S (TOTAL???? OR TALL???? OR AGGREGATE OR AGGREGATED OR AGGREGRATES OR AGGREGATING OR AGGREGATION)(3N)(PROFIT OR PROFITS OR ((NET OR GROSS)(W)(MARGIN OR MARGINS)))
S4	233382	S (MAXIMIZE OR MAXIMIZES OR MAXIMIZED OR MAXIMIZING OR MAXIMUM OR MAXIMALLY OR BEST OR HIGHEST OR MOST)(3N)(PROFIT OR PROFITS OR PROFITABILITY OR((NET OR GROSS)(W)(MARGIN OR MARGINS)))
S5	14094	S (OPTIMIZE OR OPTIMIZES OR OPTIMIZED OR OPTIMIZING OR OPTIMUM OR OPTIMALLY)(3N)(PROFIT OR PROFITS OR PROFITABILITY OR((NET OR GROSS)(W)(MARGIN OR MARGINS)))

? s s2 and (s4 or s5) and s3

```
Processing
Processing
Processing
Processing
     79831589   S2
       233382   S4
        14094   S5
       177526   S3
S6        3044   S S2 AND (S4 OR S5) AND S3

?  s (supplier or manufacturer)(5n)(cost??? or pric???)
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
      2986099   SUPPLIER
      4541604   MANUFACTURER
     25983607   COST???
     23697305   PRIC???
S7      201668   S (SUPPLIER OR MANUFACTURER)(5N)(COST??? OR PRIC???)

?  s s6 and s7
         3044   S6
       201668   S7
S8          79   S S6 AND S7

?  rd
>>>W:  Duplicate detection is not supported for File 348.
Duplicate detection is not supported for File 349.
```

```
Duplicate detection is not supported for File 347.

Records from unsupported files will be retained in the RD set.

S9          72   RD  (UNIQUE ITEMS)


?  t s9/free/all

>>>W:  "FREE" is not a valid format name in file(s): 347-349
```

9/8/1 (Item 1 from file: 15)
ABI/Inform(R)

02561605 230712171
USE FORMAT 7 OR 9 FOR FULL TEXT
Japanese pricing policies
Word Count: 5970 Length: 11 Pages
1996

Descriptors: Pricing policies; Studies; Comparative analysis; Consumer behavior
Classification Codes: 9130 (CN=Experimental/Theoretical); 9179 (CN=Asia & the Pacific); 1130 (CN=Economic theory); 7100 (CN=Market research)
Print Media ID: 14863

9/8/2 (Item 2 from file: 15)
ABI/Inform(R)

02530956 116351286
USE FORMAT 7 OR 9 FOR FULL TEXT
Selecting channels of distribution: a multi-stage process
Word Count: 6851
1996

Descriptors: Decision making; Distribution channels; Product lines; Selection; Studies
Classification Codes: 2310 (CN=Planning); 7400 (CN=Distribution); 9130 (CN=Experimental/Theoretical)
Print Media ID: 14901

9/8/3 (Item 3 from file: 15)
ABI/Inform(R)

02525762 200254711
USE FORMAT 7 OR 9 FOR FULL TEXT
Price bundling
Word Count: 4865 Length: 11 Pages
1995
Geographic Names: United States; US; Europe

Descriptors: Pricing policies; Statistical analysis; Bundling; Conjoint analysis; Market potential; Antitrust; International markets
Classification Codes: 9190 (CN=United States); 9175 (CN=Western Europe); 9130 (CN=Experimental/Theoretical); 7100 (CN=Market research); 4300 (CN=Law)
Print Media ID: 46084

9/8/4 (Item 4 from file: 15)
ABI/Inform(R)

02525759 200254451
USE FORMAT 7 OR 9 FOR FULL TEXT
Pricing in the new Europe - a time bomb?
Word Count: 4389 Length: 10 Pages
1995
Geographic Names: Europe

Descriptors: International markets; Price levels; Differences; Multinational corporations; Price variance; Pricing policies; Variance analysis
Classification Codes: 9175 (CN=Western Europe); 9130 (CN=Experimental/Theoretical); 1110 (CN=Economic conditions & forecasts); 7000 (CN=Marketing); 9510 (CN=Multinational corporations)
Print Media ID: 46084

9/8/5 (Item 5 from file: 15)
ABI/Inform(R)

02500008 116359373
USE FORMAT 7 OR 9 FOR FULL TEXT
A linear programming model for integrated steel production and distribution planning
Word Count: 4163
1997

Descriptors: Systems integration; Linear programming; Steel industry; Models; Manufacturing; Production management
Classification Codes: 9130 (CN=Experimental/Theoretical); 5310 (CN=Production planning & control)
Print Media ID: 14900

9/8/6 (Item 6 from file: 15)
ABI/Inform(R)

02115946 67547337
Is channel coordination all it is cracked up to be?

Winter 2000
Geographic Names: United States; US

Descriptors: Wholesale; Supply chains; Prices; Distribution channels; Profit maximization; Retailing industry; Tariffs; Statistical data; Models; Studies
Classification Codes: 9190 (CN=United States); 9130 (CN=Experimental/Theoretical); 8390 (CN=Retailing industry); 7400 (CN=Distribution)
Print Media ID: 28003

9/8/7 (Item 7 from file: 15)
ABI/Inform(R)

01996520 50709665
USE FORMAT 7 OR 9 FOR FULL TEXT
Progress and regress on InterLATA competition
Word Count: 25009 Length: 59 Pages
Mar 2000
Geographic Names: United States; US

Descriptors: Telecommunications Act 1996-US; Long distance; Competition; Deregulation; Market entry; Court decisions
Classification Codes: 4300 (CN=Law); 8330 (CN=Broadcasting & telecommunications); 9190 (CN=United States)
Print Media ID: 26175

9/8/8 (Item 8 from file: 15)
ABI/Inform(R)

01914172 05-65164
USE FORMAT 7 OR 9 FOR FULL TEXT
Trade promotion: Essential to selling through resellers
Word Count: 5206 Length: 10 Pages
Fall 1999
Geographic Names: US

Descriptors: Trade promotion; Manufacturers; Corporate profits; Advantages; Pricing policies
Classification Codes: 9190 (CN=United States); 8600 (CN=Manufacturing industries not elsewhere classified); 3400 (CN=Investment analysis)

9/8/9 (Item 9 from file: 15)
ABI/Inform(R)

01849981 05-00973
USE FORMAT 7 OR 9 FOR FULL TEXT
Transfer pricing strategies and lot sizing decisions
Word Count: 3794 Length: 11 Pages
Summer 1999

Geographic Names: US

Descriptors: Transfer pricing; Strategic management; Decision making; Studies; Production costs; Manufacturing
Classification Codes: 9190 (CN=United States); 9130 (CN=Experimental/Theoretical); 8600 (CN=Manufacturing industries not elsewhere classified); 2310 (CN=Planning)

9/8/10 (Item 10 from file: 15)
ABI/Inform(R)

01840683 04-91674
USE FORMAT 7 OR 9 FOR FULL TEXT
Will Khan foster or hinder franchising? An economic analysis of maximum resale price maintenance
Word Count: 9696 Length: 12 Pages
Spring 1999
Geographic Names: US

Descriptors: Supreme Court decisions; Antitrust; Resale price maintenance; Franchising; Impact analysis; Economic theory
Classification Codes: 9190 (CN=United States); 4330 (CN=Litigation); 1130 (CN=Economic theory)

9/8/11 (Item 11 from file: 15)
ABI/Inform(R)

01681099 03-32089
USE FORMAT 7 OR 9 FOR FULL TEXT
Kamikaze pricing
Word Count: 4537 Length: 10 Pages
Summer 1998
Geographic Names: US

Descriptors: Market strategy; Market penetration; Market prices; Market erosion; Pricing policies; Return on investment; Problems
Classification Codes: 9190 (CN=United States); 3100 (CN=Capital & debt management); 7000 (CN=Marketing)

9/8/12 (Item 12 from file: 15)
ABI/Inform(R)

01657569 03-08559
USE FORMAT 7 OR 9 FOR FULL TEXT
Thinking about Economics
Word Count: 12096 Length: 16 Pages

Spring 1998
Geographic Names: US

Descriptors: Economists; Opinions; Economic theory
Classification Codes: 9190 (CN=United States); 1130 (CN=Economic theory)

9/8/13 (Item 13 from file: 15)
ABI/Inform(R)

01559235 02-10224
USE FORMAT 7 OR 9 FOR FULL TEXT
A contingent-claims approach to the inventory-stocking decision
Word Count: 5294 Length: 14 Pages
Winter 1997
Geographic Names: US

Descriptors: Inventory management; Studies; Comparative analysis; Options markets; Inventory control; Economic theory
Classification Codes: 9190 (CN=United States); 9130 (CN=Experimental/Theoretical); 5330 (CN=Inventory management); 3400 (CN=Investment analysis); 1130 (CN=Economic theory)

9/8/14 (Item 14 from file: 15)
ABI/Inform(R)

01481057 01-32045
USE FORMAT 7 OR 9 FOR FULL TEXT
Direct vertical integration strategies
Word Count: 9146 Length: 15 Pages
Jul 1997

Descriptors: Studies; Economic theory; Vertical integration; Oligopoly; Market strategy
Classification Codes: 9130 (CN=Experimental/Theoretical); 1130 (CN=Economic theory); 7000 (CN=Marketing)

9/8/15 (Item 15 from file: 15)
ABI/Inform(R)

01412189 00063176
USE FORMAT 7 OR 9 FOR FULL TEXT
Sustainable marketing
Word Count: 7060 Length: 12 Pages
Fall 1996
Geographic Names: US

Descriptors: Sustainable development; Green marketing; Industrial policy; Studies

Classification Codes: 9190 (CN=United States); 9130 (CN=Experimental/Theoretical); 1540 (CN=Pollution control); 7000 (CN=Marketing)

9/8/16 (Item 16 from file: 15)
ABI/Inform(R)

01342453 99-91849
USE FORMAT 7 OR 9 FOR FULL TEXT
Interdependency, contracting, and relational behavior in marketing channels
Word Count: 13522 Length: 20 Pages
Oct 1996
Geographic Names: US

Descriptors: Wholesale; Distributors; Studies; Statistical analysis; Dependence; Marketing; Vendor supplier relations; Effects; Contracts
Classification Codes: 9190 (CN=United States); 8303 (CN=Wholesale industry); 2400 (CN=Public relations); 9130 (CN=Experimental/Theoretical); 7000 (CN=Marketing)

9/8/17 (Item 17 from file: 15)
ABI/Inform(R)

01242263 98-91658
USE FORMAT 7 OR 9 FOR FULL TEXT
Achieving coordination in public utility industries: A critique of troublesome options
Word Count: 4150 Length: 10 Pages
Jun 1996
Geographic Names: US

Descriptors: Public utilities; Oligopoly; Economic conditions; Regulatory reform; Studies
Classification Codes: 9190 (CN=United States); 1130 (CN=Economic theory); 4310 (CN=Regulation); 8340 (CN=Electric, water & gas utilities); 9130 (CN=Experimental/Theoretical)

9/8/18 (Item 18 from file: 15)
ABI/Inform(R)

01158960 98-08355
USE FORMAT 7 OR 9 FOR FULL TEXT
Analysis tool for capital decisions helps weigh investment direction
Word Count: 1775 Length: 4 Pages
Jan 1996
Geographic Names: US

Descriptors: Capital expenditures; Paper industry; Statistical analysis; Production costs; Facilities planning; Economies of scale

Classification Codes: 8630 (CN=Lumber & wood products industries); 3100 (CN=Capital & debt management); 2310 (CN=Planning); 9190 (CN=United States)

9/8/19 (Item 19 from file: 15)
ABI/Inform(R)

01155140 98-04535
USE FORMAT 7 OR 9 FOR FULL TEXT
Feeling the heat - Part 2
Word Count: 8303 Length: 15 Pages
Winter 1995
Geographic Names: US

Descriptors: Marketing management; Productivity; Efficiency; Information technology; Information management
Classification Codes: 9190 (CN=United States); 7000 (CN=Marketing); 5240 (CN=Software & systems)

9/8/20 (Item 20 from file: 15)
ABI/Inform(R)

01112395 97-61789
USE FORMAT 7 OR 9 FOR FULL TEXT
Returns policies: Make money by making good
Word Count: 5697 Length: 8 Pages
Fall 1995
Geographic Names: US

Descriptors: Inventory management; Distribution channels; Benefit cost analysis
Classification Codes: 9190 (CN=United States); 5330 (CN=Inventory management); 7400 (CN=Distribution)

9/8/21 (Item 21 from file: 15)
ABI/Inform(R)

01004567 96-53960
USE FORMAT 7 OR 9 FOR FULL TEXT
Warehouse location under service-sensitive demand
Word Count: 5480 Length: 30 Pages
1995

Descriptors: Warehouses; Location analysis; Distribution planning; Customer services; Studies
Classification Codes: 5160 (CN=Transportation); 2310 (CN=Planning); 9130 (CN=Experimental/Theoretical)

9/8/22 (Item 22 from file: 15)

ABI/Inform(R)

00956560 96-05953
USE FORMAT 7 OR 9 FOR FULL TEXT
Making best use of performance measures and information
Word Count: 5760 Length: 16 Pages
1994

Descriptors: Decision making; Performance evaluation; Studies; Purchasing; Organizational behavior
Classification Codes: 2500 (CN=Organizational behavior); 9130 (CN=Experimental/Theoretical); 5120 (CN=Purchasing)

9/8/23 (Item 23 from file: 15)
ABI/Inform(R)

00939644 95-89036
USE FORMAT 7 OR 9 FOR FULL TEXT
Competitive advantage: Superior offer or unfair dominance?
Word Count: 7822 Length: 20 Pages
Fall 1994

Descriptors: Competitive advantage; Policy making; International; Trends; Antitrust laws
Classification Codes: 9180 (CN=International); 2310 (CN=Planning)

9/8/24 (Item 24 from file: 15)
ABI/Inform(R)

00844850 94-94242
USE FORMAT 7 OR 9 FOR FULL TEXT
Changing role and relevance of purchasing: Impact on organizational effectiveness
Word Count: 5829 Length: 9 Pages
1993

Descriptors: Purchasing department; Functions; Roles; Impacts; Effectiveness
Classification Codes: 5120 (CN=Purchasing)

9/8/25 (Item 25 from file: 15)
ABI/Inform(R)

00840860 94-90252
USE FORMAT 7 OR 9 FOR FULL TEXT
Stochastic (s,S) pricing and the U.S. aluminum industry
Word Count: 3969 Length: 9 Pages
Winter 1994

Geographic Names: US

Descriptors: Studies; Economic theory; Economic models; Aluminum industry
Classification Codes: 9130 (CN=Experimental/Theoretical); 1130 (CN=Economic theory); 8660 (CN=Metalworking industry); 9190 (CN=United States)

9/8/26 (Item 26 from file: 15)
ABI/Inform(R)

00808426 94-57818
USE FORMAT 7 OR 9 FOR FULL TEXT
Kohlberg Kravis Roberts & Co. and the restructuring of American capitalism
Word Count: 18701 Length: 46 Pages
Spring 1993
Company Names:
Kohlberg Kravis Roberts & Co (Duns: 06-022-3393)
Geographic Names: US

Descriptors: Case studies; Investment bankers; Leveraged buyouts; Success; History
Classification Codes: 9110 (CN=Company specific); 8130 (CN=Investment services); 2330 (CN=Acquisitions & mergers); 9190 (CN=United States)

9/8/27 (Item 27 from file: 15)
ABI/Inform(R)

00778635 94-28027
USE FORMAT 7 OR 9 FOR FULL TEXT
Improving materials cost
Word Count: 3879 Length: 7 Pages
1993
Geographic Names: US

Descriptors: Construction costs; Materials; Cost control; Cost engineering; Recommendations
Classification Codes: 3100 (CN=Capital & debt management); 9190 (CN=United States); 8370 (CN=Construction industry)

9/8/28 (Item 28 from file: 15)
ABI/Inform(R)

00726488 93-75709
USE FORMAT 7 OR 9 FOR FULL TEXT
Pharmaceutical Prices with Insurance Coverage and Formularies
Word Count: 9074 Length: 18 Pages
May 1992

Geographic Names: Canada; Nova Scotia

Descriptors: Economic models; Economic theory; Pricing policies; Pharmaceutical industry ; Rivalries; Markups; Kickbacks; Studies
Classification Codes: 1130 (CN=Economic theory); 9130 (CN=Experimental/Theoretical); 8641 (CN=Pharmaceuticals industry); 9172 (CN=Canada)

9/8/29 (Item 29 from file: 15)
ABI/Inform(R)

00701692 93-50913
USE FORMAT 7 OR 9 FOR FULL TEXT
When and when not to vertically integrate
Word Count: 6734 Length: 13 Pages
Spring 1993
Geographic Names: US

Descriptors: Vertical integration; Corporate planning; Criteria; Management decisions; Market strategy; Organizational behavior
Classification Codes: 9190 (CN=United States); 2310 (CN=Planning); 7000 (CN=Marketing); 2500 (CN=Organizational behavior)

9/8/30 (Item 30 from file: 15)
ABI/Inform(R)

00690216 93-39437
USE FORMAT 7 OR 9 FOR FULL TEXT
Industry: Big Blue looks east
Word Count: 2661 Length: 4 Pages
Apr 15, 1993
Company Names:
IBM Corp (Duns: 00-136-8083 Ticker: IBM)
Geographic Names: Asia

Descriptors: Case studies; Computer industry; Manycompanies; Business conditions; Manycountries; International markets; Sales; Multinational corporations
Classification Codes: 9110 (CN=Company specific); 8651 (CN=Computer industry); 9179 (CN=Asia & the Pacific); 7000 (CN=Marketing); 9510 (CN=Multinational corporations); 9180 (CN=International)

9/8/31 (Item 31 from file: 15)
ABI/Inform(R)

00626630 92-41732
USE FORMAT 7 OR 9 FOR FULL TEXT
The European Pricing Time Bomb: And How to Cope With It
Word Count: 4900 Length: 10 Pages
Jun 1992
Geographic Names: Europe

Descriptors: EC single market; Pricing policies; Price level changes; Strategic planning ; Profit maximization; Optimization; Statistical analysis
Classification Codes: 2310 (CN=Planning); 1300 (CN=International trade & foreign investment); 7000 (CN=Marketing); 9175 (CN=Western Europe)

9/8/32 (Item 32 from file: 15)
ABI/Inform(R)

00620392 92-35494
USE FORMAT 7 OR 9 FOR FULL TEXT
Business Volume Discount: A New Perspective on Discount Pricing Strategy
Word Count: 2657 Length: 4 Pages
Spring 1992

Descriptors: Volume discount; Advantages; Order quantity; Purchasing; Discount rates
Classification Codes: 5120 (CN=Purchasing); 5330 (CN=Inventory management)

9/8/33 (Item 33 from file: 15)
ABI/Inform(R)

00585597 92-00770
USE FORMAT 7 OR 9 FOR FULL TEXT
CADvantages
Word Count: 2092 Length: 4 Pages
Dec 1991
Company Names:
Dillard Department Stores Inc (Duns: 00-486-7198 Ticker: DDS)
Mervyns (Duns: 00-796-8670)
Geographic Names: US

Descriptors: CAD; Retail stores; Applications; Advantages; Design; Architecture; Software packages
Classification Codes: 8390 (CN=Retailing industry); 5240 (CN=Software & systems); 9190 (CN=United States)

9/8/34 (Item 34 from file: 15)
ABI/Inform(R)

00550095 91-24452
USE FORMAT 7 OR 9 FOR FULL TEXT
Absorption Costing: What Relevance?
Word Count: 3023 Length: 6 Pages
May 1991
Geographic Names: Australia

Descriptors: Absorption costing; Accounting standards; Direct costs; Disclosure; Accounting policies
Classification Codes: 4120 (CN=Accounting policies & procedures); 9179 (CN=Asia & the Pacific)

9/8/35 (Item 1 from file: 810)
Business Wire

0970176 BW1042

PA ALLEGHENY TELEDYNE : Allegheny Teledyne Reports Fourth Quarter Earnings

January 28, 1999

Byline: Business Editors
Word Count: 3307

9/8/36 (Item 1 from file: 16)
Gale Group PROMT(R)

07524848 Supplier Number: 62835168 (USE FORMAT 7 FOR FULLTEXT)

Seeing green.
June , 2000
Word Count: 1070
Publisher Name: Penton Media, Inc.
Company Names: *Maxager Technology Inc.
Product Names: *7372416 (Manufacturing, Distribution & Retailing Software)
Industry Names: BUSN (Any type of business); METL (Metals, Metalworking and Machinery)
SIC Codes: 7372 (Prepackaged software)
NAICS Codes: 51121 (Software Publishers)
Special Features: COMPANY

9/8/37 (Item 2 from file: 16)
Gale Group PROMT(R)

06423504 Supplier Number: 54938125 (USE FORMAT 7 FOR FULLTEXT)

Record Sales, Record Profits.(convenience stores in 1998)

May 31 , 1999
Word Count: 12983
Publisher Name: MacFadden Publishing, Inc.
Event Names: *830 (Sales, profits & dividends)
Geographic Names: *1USA (United States)
Product Names: *5411300 (Convenience Stores)
Industry Names: BUSN (Any type of business); RETL (Retailing)
NAICS Codes: 44512 (Convenience Stores)

9/8/38 (Item 1 from file: 148)
Gale Group Trade & Industry DB

13396677 Supplier Number: 70465358 (USE FORMAT 7 OR 9 FOR FULL TEXT)
BUSINESS SITUATION.(Statistical Data Included)

Oct , 2000
Word Count: 4001 Line Count: 00629
Industry Codes/Names: BUSN Any type of business
Descriptors: Gross domestic product--Statistics; United States economic conditions-- Statistics
Geographic Codes: 1USA United States
Product/Industry Names: 9107600 (Economic Development NEC)
NAICS Codes: 92512 Administration of Urban Planning and Community and Rural Development
File Segment: TI File 148

9/8/39 (Item 2 from file: 148)
Gale Group Trade & Industry DB

12139497 Supplier Number: 61207800 (USE FORMAT 7 OR 9 FOR FULL TEXT)
An equilibrium analysis of linear, proportional and uniform allocation of scarce capacity.(Statistical Data Included)

Sept , 1999
Word Count: 10781 Line Count: 01006
Industry Codes/Names: BUSN Any type of business; ENG Engineering and Manufacturing
Descriptors: Game theory--Analysis; Supply and demand--Analysis; Retail industry-- Management; Mathematical models--Analysis; Inventory control--Technique
Geographic Codes: 1USA United States
File Segment: AI File 88

9/8/40 (Item 3 from file: 148)
Gale Group Trade & Industry DB

12049062 Supplier Number: 61829581 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Interstate cigarette bootlegging: extent, revenue losses, and effects of federal intervention.(Statistical Data

Included)

March , 2000
Word Count: 11110 Line Count: 00934
Industry Codes/Names: BANK Banking, Finance and Accounting; BUSN Any type of business
Descriptors: Cigarettes--Distribution; State taxation--Economic aspects; Excise tax-- Economic aspects; Tax evasion--Analysis; Smuggling--Economic aspects
Geographic Codes: 0JSTA States; 1USA United States
Product/Industry Names: 9101120 (Excise Taxes)
NAICS Codes: 92113 Public Finance Activities
File Segment: LRI File 150
Statute Name: Contraband Cigarette Act

9/8/41 (Item 4 from file: 148)
Gale Group Trade & Industry DB

11776541 Supplier Number: 58264336 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Basic supply chain management = greater profits.(includes related article on the benefits of outsourcing)(part 2.)

Oct , 1999
Word Count: 1852 Line Count: 00145
Industry Codes/Names: BUSN Any type of business; TREE Forest Products
Descriptors: Outsourcing--Management; Woodworking industry--Management
Product/Industry Names: 2431000 (Millwork)
Product/Industry Names: 2431 Millwork
NAICS Codes: 32191 Millwork
File Segment: TI File 148

9/8/42 (Item 5 from file: 148)
Gale Group Trade & Industry DB

11590105 Supplier Number: 55905534 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Get in the driver's seat of lending to automobile dealerships.

Nov , 1998
Word Count: 6878 Line Count: 00560
Industry Codes/Names: BANK Banking, Finance and Accounting; BUSN Any type of business
Descriptors: Automobile dealers--Finance; Banking industry--Management; Commercial finance companies--Technique; Loans--Management
Product/Industry Names: 5511000 (Motor Vehicle Dealers); 6020230 (Business Financing)
Product/Industry Names: 5511 New and used car dealers; 6020 Commercial Banks
NAICS Codes: 441 Motor Vehicle and Parts Dealers; 52211 Commercial Banking
File Segment: MC File 75

9/8/43 (Item 6 from file: 148)
Gale Group Trade & Industry DB

11579730 Supplier Number: 20119470 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Pricing and ordering strategies in manufacturing and distribution alliances.

August , 1997
Word Count: 8178 Line Count: 00696

Special Features: illustration; graph
Industry Codes/Names: BUSN Any type of business; ENG Engineering and Manufacturing
Descriptors: Distribution of goods--Management; Manufacturing industry--Logistics; Logistics--Management
File Segment: AI File 88

9/8/44 (Item 7 from file: 148)
Gale Group Trade & Industry DB

11530271 Supplier Number: 57796612 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Exclusive versus common dealership.

Oct , 1999
Word Count: 8327 Line Count: 00685
Descriptors: Distribution channels--Research; Distribution of goods--Research; Retail industry--Research
Product/Industry Names: 5200000 (Retail Trade)
File Segment: TI File 148

9/8/45 (Item 8 from file: 148)
Gale Group Trade & Industry DB

10861474 Supplier Number: 54036235 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The use and abuse of power in supply chains.(includes related articles on supply chain partners)

Jan-Feb , 1999
Word Count: 7772 Line Count: 00666

Special Features: illustration; 3
Industry Codes/Names: BUS Business, General; BUSN Any type of business
Descriptors: Distribution channels--Analysis; Industrial suppliers--Evaluation
File Segment: MI File 47

9/8/46 (Item 9 from file: 148)
Gale Group Trade & Industry DB

10494781 Supplier Number: 53049105 (USE FORMAT 7 OR 9 FOR FULL TEXT)
PUSHING PRODUCTION TO NEW HEIGHTS.(development of lean production models in manufacturing)

Sept 21 , 1998
Word Count: 5432 Line Count: 00447
Industry Codes/Names: BUS Business, General; BUSN Any type of business
Descriptors: Manufacturing industry--Production management; Industrial efficiency-- Management
Product/Industry Names: 9913000 (Production Management)
File Segment: MI File 47

9/8/47 (Item 10 from file: 148)

Gale Group Trade & Industry DB

10257176 Supplier Number: 20792327 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Distribution services and economic power in a channel.

Spring , 1998
Word Count: 10513 Line Count: 00899
Industry Codes/Names: BUSN Any type of business; RETL Retailing
Descriptors: Retail industry--Analysis; Distribution channels--Analysis
Product/Industry Names: 5200000 (Retail Trade); 9914500 (Distribution Channels)
File Segment: TI File 148

9/8/48 (Item 11 from file: 148)
Gale Group Trade & Industry DB

10068292 Supplier Number: 20293943 (USE FORMAT 7 OR 9 FOR FULL TEXT)
A contingent-claims approach to the inventory-stocking decision. (includes appendix)

Winter , 1997
Word Count: 7863 Line Count: 00604

Special Features: table; graph; illustration
Industry Codes/Names: BANK Banking, Finance and Accounting; BUSN Any type of business
Descriptors: Inventory control--Technique; Inventories--Management
File Segment: MC File 75

9/8/49 (Item 12 from file: 148)
Gale Group Trade & Industry DB

09647352 Supplier Number: 18138991 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Coordination and manufacturer profit maximization: the multiple retailer channel.

Summer , 1995
Word Count: 9554 Line Count: 00827

Special Features: graph; illustration
Industry Codes/Names: BUSN Any type of business; RETL Retailing
Descriptors: Retail industry--Research; Manufacturing industry--Distribution; Distribution channels--Research
Product/Industry Names: 3900000 (Manufacturing NEC); 5200000 (Retail Trade)
Product/Industry Names: 3900 MISCELLANEOUS MANUFACTURING INDUSTRIES
File Segment: TI File 148

9/8/50 (Item 13 from file: 148)
Gale Group Trade & Industry DB

09647351 Supplier Number: 18138990 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Investigating retailer product category pricing from household scanner panel data.

Summer , 1995
Word Count: 9843 Line Count: 00855

Special Features: table; graph; illustration
Industry Codes/Names: BUSN Any type of business; RETL Retailing
Descriptors: Retail industry--Prices and rates; Pricing--Research
Product/Industry Names: 5200000 (Retail Trade)
File Segment: TI File 148

9/8/51 (Item 14 from file: 148)
Gale Group Trade & Industry DB

09341453 Supplier Number: 19193566 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Aggregate versus product-specific pricing: implications for franchise and traditional channels.

Winter , 1996
Word Count: 9754 Line Count: 00818
Industry Codes/Names: RETL Retailing; BUSN Any type of business
Descriptors: Pricing--Analysis; Franchises--Prices and rates; Retail industry--Prices and rates
Product/Industry Names: 5200000 (Retail Trade); 5200130 (Franchising)
Product/Industry Names: 6794 Patent owners and lessors
File Segment: TI File 148

9/8/52 (Item 15 from file: 148)
Gale Group Trade & Industry DB

08954355 Supplier Number: 18648435 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Price competition in a duopoly common retailer channel.

Summer , 1996
Word Count: 7426 Line Count: 00635

Special Features: illustration; table; chart
Industry Codes/Names: RETL Retailing; BUSN Any type of business
Descriptors: Competition (Economics)--Analysis; Retail industry--Management; Duopolies-- Research
Product/Industry Names: 5200000 (Retail Trade)
File Segment: TI File 148

9/8/53 (Item 16 from file: 148)
Gale Group Trade & Industry DB

08934773 Supplier Number: 18604528 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Supplier preferences and dumping: an analysis of Japanese corporate groups.

July , 1996
Word Count: 4764 Line Count: 00369

Special Features: illustration; graph
Descriptors: Keiretsu system--Economic aspects; Japanese--Relations with the United States; Dumping (International trade)--Analysis; International trade-- Analysis
Product/Industry Names: 9103010 (Intnl Economic Policy)
File Segment: TI File 148

9/8/54 (Item 17 from file: 148)
Gale Group Trade & Industry DB

08911152 Supplier Number: 18515414
The chemistry of profitable pricing: formulating margin-management solutions. (includes related articles on successful pricing, convincing consumers, and price shopping tips)(Cover Story)

June , 1996
Word Count: 5186 Line Count: 00412

Special Features: illustration; photograph; graph
Industry Codes/Names: CNST Construction and Materials; HOME Home Furnishings; RETL Retailing; BUSN Any type of business
Descriptors: Hardware stores--Prices and rates; Pricing--Technique; Price control-- Technique
Product/Industry Names: 5251000 (Hardware Stores)
Product/Industry Names: 5251 Hardware stores
File Segment: TI File 148

9/8/55 (Item 18 from file: 148)
Gale Group Trade & Industry DB

08902492 Supplier Number: 18598424
Strategic interdependence in European East-West gas trade: a hierarchical Stackelberg game approach.

July , 1996
Word Count: 8201 Line Count: 00654

Special Features: illustration; table
Descriptors: International trade--Analysis; Contracts--Models; Gas industry--Analysis; Europe, Eastern--Business and industry
Product/Industry Names: 4920000 (Gas Utilities)
Product/Industry Names: 4920 Gas Production and Distribution
File Segment: TI File 148

9/8/56 (Item 19 from file: 148)
Gale Group Trade & Industry DB

08229795 Supplier Number: 17539621 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Revamping the Orphan Drug Act: potential impact on the world pharmaceutical market.

Wntr , 1995
Word Count: 15753 Line Count: 01343
Industry Codes/Names: INTL Business, International; GOVT Government and Law
Descriptors: Pharmaceutical industry--International aspects; Orphan drugs--Laws, regulations, etc.; Drugs--Prices and rates; Pharmaceutical policy--Laws, regulations, etc.
Geographic Codes: ZINT; NNUS
Geographic Names: international; United States
File Segment: LRI File 150
Statute Name: Orphan Drug Act of 1983

9/8/57 (Item 20 from file: 148)
Gale Group Trade & Industry DB

07315652 Supplier Number: 16474464 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Don't just optimize - unbundle. (automotive distribution)(includes related article)

Summer , 1994
Word Count: 5148 Line Count: 00414

Special Features: illustration; table; graph
Industry Codes/Names: BUS Business, General
Descriptors: Automobile industry--Distribution; Automobile dealers--Evaluation

Product/Industry Names: 5511000 (Motor Vehicle Dealers)
Product/Industry Names: 3711 Motor vehicles and car bodies; 5511 New and used car dealers
File Segment: TI File 148

9/8/58 (Item 21 from file: 148)
Gale Group Trade & Industry DB

07240159 Supplier Number: 15351111 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Power balance and equilibrium channel structure in the Korean gasoline market.

Jan , 1994
Word Count: 5751 Line Count: 00502

Special Features: illustration; table; chart
Industry Codes/Names: OIL Petroleum, Energy Resources and Mining
Descriptors: Balance of power--Economic aspects; Gasoline industry--Marketing; Korea-- Business and industry
Product/Industry Names: 2911130 (Motor Gasoline)
Product/Industry Names: 2911 Petroleum refining
File Segment: TI File 148

9/8/59 (Item 22 from file: 148)
Gale Group Trade & Industry DB

05910363 Supplier Number: 12414967 (USE FORMAT 7 OR 9 FOR FULL TEXT)
An efficiency explanation for why firms second source.

April , 1992
Word Count: 10088 Line Count: 00842

Special Features: illustration; chart; table
Industry Codes/Names: BUS Business, General
Descriptors: Outsourcing--Economic aspects; Production management--Research; Semiconductor industry--Production management
Product/Industry Names: 3674 Semiconductors and related devices
File Segment: TI File 148

9/8/60 (Item 23 from file: 148)
Gale Group Trade & Industry DB

05591882 Supplier Number: 11397020 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Capturing strategic rent: full-line forcing, brand discounts, aggregate rebates, and maximum resale price maintenance.

Sept , 1991

Word Count: 8448 Line Count: 00670
Industry Codes/Names: BANK Banking, Finance and Accounting; BUS Business, General
Descriptors: Monopolies--Research; Cartels--Research; Resale price maintenance--Research ; Rent (Economic theory)--Research; Retail industry--Prices and rates
File Segment: TI File 148

9/8/61 (Item 24 from file: 148)
Gale Group Trade & Industry DB

05591880 Supplier Number: 11397016 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Resale price maintenance and manufacturer competition for exclusive dealerships.

Sept , 1991
Word Count: 14241 Line Count: 01147
Industry Codes/Names: BANK Banking, Finance and Accounting; BUS Business, General
Descriptors: Retail industry--Models; Equilibrium (Economics)--Models; Franchises-- Research; Resale price maintenance--Research; Pricing--Laws, regulations, etc.
File Segment: TI File 148

9/8/62 (Item 25 from file: 148)
Gale Group Trade & Industry DB

04913421 Supplier Number: 10617248 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Maximizing profits from periodic department store promotions.

Winter , 1990
Word Count: 7860 Line Count: 00661

Special Features: illustration; graph; table
Industry Codes/Names: RETL Retailing
Descriptors: Sales management--Technique; Price cutting--Economic aspects; Retail industry--Marketing; Sales promotions--Research

Product/Industry Names: 5311 Department stores; 8732 Commercial nonphysical research
File Segment: TI File 148

9/8/63 (Item 26 from file: 148)
Gale Group Trade & Industry DB

04613080 Supplier Number: 08648050 (USE FORMAT 7 OR 9 FOR FULL TEXT)
North American profiles. (The Datamation 100) (company profile)

June 15 , 1990
Word Count: 20685 Line Count: 01720

Special Features: illustration; photograph; graph
Industry Codes/Names: CMPT Computers and Office Automation
Descriptors: Computer industry--Analysis
Product/Industry Names: 3571 Electronic computers
File Segment: CD File 275

9/8/64 (Item 27 from file: 148)
Gale Group Trade & Industry DB

03900116 Supplier Number: 07519039 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Profit margins, prices and turn over: main ingredients in selling used guns.

March , 1989
Word Count: 1939 Line Count: 00135

Special Features: illustration; photograph
Industry Codes/Names: SPRT Sports, Sporting Goods and Toys
Descriptors: Firearms--Marketing; Secondhand industry--Marketing; Specialty stores-- Marketing
Product/Industry Names: 5941 Sporting goods and bicycle shops; 5932 Used merchandise stores; 5940 Miscellaneous Shopping Goods Stores
File Segment: TI File 148

9/8/65 (Item 28 from file: 148)
Gale Group Trade & Industry DB

01763987 Supplier Number: 02622650 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Computers on the couch: CE talks to the analysts. (roundtable)

Feb , 1983
Word Count: 4238 Line Count: 00319

Special Features: illustration; portrait
Industry Codes/Names: ELEC Electronics
Descriptors: computer industry--Forecasts; Video game industry--Forecasts; Computer software industry--Forecasts
Named Persons: Hassenberg, Mark--Interviews; Krasko, Michael--Interviews; McEvoy, Terence --Interviews; Preston, Michele--Interviews
Product/Industry Names: 3571 Electronic computers; 7372 Prepackaged software; 3944 Games, toys, and children's vehicles
File Segment: TI File 148

9/8/66 (Item 1 from file: 20)

Dialog Global Reporter

03667818
E A R N I N G S

December 06, 1998
Word Count: 2417
Descriptors: Results; Company News
Country Names/Codes: Estonia (EE)
Regions: Baltic States; Europe; Former USSR

9/8/69 (Item 1 from file: 635)
Business Dateline(R)

0099542 89-23378
Manufacturers Say Health Care Taking a Larger Share of Profits

Publication Date: 890612
Word Count: 1,304
Dateline: Wichita, KS, US

Company Names:
Classification Codes: 8600 (Manufacturing industries not elsewhere classified); 6400 (Employee benefits & compensation); 3100 (Capital & debt management)
Descriptors: Manufacturers; Health insurance; Profits; Personnel costs; Surveys; Employee benefits; Business expenses; PPOs; HMOs; Cost reduction; Midwest

9/8/70 (Item 1 from file: 47)
Gale Group Magazine DB(TM)

02948494 Supplier Number: 05035734 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The Datamation 100. (worldwide survey of 100 electronic data processing companies) (company profile)

June 15 , 1987
Word Count: 40934 Line Count: 03239

Special Features: illustration; table
Descriptors: Datamation (Periodical)--Surveys; Computer industry--Surveys; Corporations --Statistics; Electronic data processing--Surveys
SIC Codes: 3571 Electronic computers; 7374 Data processing and preparation
File Segment: MI File 47

9/8/71 (Item 2 from file: 47)
Gale Group Magazine DB(TM)

02507266 Supplier Number: 03115185 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Big blue's big bucks; by 1988, IBM's annual revenues will hit $88 billion, or 1.8% of the GNP. Net profits will exceed $25,000 per minute.

Feb , 1984
Word Count: 3696 Line Count: 00286

Special Features: illustration; table
Company Names: International Business Machines Corp.--Finance; Intel Corp.--Securities
Descriptors: computer industry--Finance
SIC Codes: 3571 Electronic computers
File Segment: MI File 47

9/8/72 (Item 3 from file: 47)
Gale Group Magazine DB(TM)

02505752 Supplier Number: 03286557 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The Datamation 100; the leading U.S. DP companies. (data processing)

June 1 , 1984
Word Count: 36956 Line Count: 02899

Special Features: illustration; table
Descriptors: computer industry--Finance
SIC Codes: 3571 Electronic computers
File Segment: MI File 47

>>>W: "FREE" is not a valid format name in file(s): 347-349

9/8/71 (Item 2 from file: 47)
Gale Group Magazine DB(TM)

02507266 Supplier Number: 03115185 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Big blue's big bucks; by 1988, IBM's annual revenues will hit $88 billion, or 1.8% of the GNP. Net profits will exceed $25,000 per minute.

Feb , 1984
Word Count: 3696 Line Count: 00286

Special Features: illustration; table
Company Names: International Business Machines Corp.--Finance; Intel Corp.--Securities
Descriptors: computer industry--Finance
SIC Codes: 3571 Electronic computers
File Segment: MI File 47

9/8/72 (Item 3 from file: 47)
Gale Group Magazine DB(TM)

02505752 Supplier Number: 03286557 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The Datamation 100; the leading U.S. DP companies. (data processing)

June 1 , 1984
Word Count: 36956 Line Count: 02899

Special Features: illustration; table
Descriptors: computer industry--Finance
SIC Codes: 3571 Electronic computers
File Segment: MI File 47

? t s9/k/59

9/K/59 (Item 22 from file: 148)
Gale Group Trade & Industry DB

...optimal capacity choice under second-sourcing, kL is found by maximizing its expected profits, yielding Total industry capacity available for use by the patent holder is n-times each firm's...Each of these firms' second-sourcing receipts therefore are [Lambda. k.sub.i]. Finally, firms' total expected profits are then simply a probability weighted average of all of the above terms, less capacity...

19920400

? t s9/k/54

9/K/54 (Item 17 from file: 148)
Gale Group Trade & Industry DB

Abstract: ...factors, he can lower prices to make a good price image while not sacrificing his total profits. Implementation of a pricing system should also be guided by gathering information on rival stores...

...him less than $7.50, since that group of products represented 68 percent of his profits.

He says most wholesalers are not raising margins high enough on these items. Greg Hauca, vice president-marketing...that cost him at least $125 were only contributing about 2.5 percent of his total gross margin dollars. He decided that since he was not making any money on these products anyway...

...and the number of customers shopping at the store. Most importantly, it will increase the total gross margin dollars the store is generating.

The changes this East Coast Ace retailer made accomplished all... items," Schneider says.

* Price shop commodity items regularly, and re-check other items when your supplier changes your cost.

* Price shop several departments. Selecting 10 to 20 items by department seems to be the right...

19960600

? t s9/k/51

9/K/51 (Item 14 from file: 148)
Gale Group Trade & Industry DB

...used (aggregate versus product-specific) can also serve as a channel coordination mechanism.

BACKGROUND LITERATURE

Price and service coordination issues in manufacturer -retailer contexts and similar sales-force moral hazard problems have been analyzed by Spengler (1950...an aggregate franchise fee, F, and a common royalty rate, r.

We also consider traditional manufacturer-retailer relationships under two different pricing arrangements. First we consider a case in which the manufacturer uses a quantity discount schedule ...

...scheme, consisting of wholesale prices of (w.sub.A) and (w.sub.B), with its profit under an aggregate pricing scheme consisting of an aggregate wholesale price of w applied to the total sales...

...For a given pricing scheme, each franchisee determines the local price and service level that maximizes its own profit. Thus, the retail price and local service are affected by the pricing scheme. The franchisor recognizes that franchisees' behavior is influenced by the pricing scheme and selects a scheme that maximizes the franchisor's profit, taking into consideration franchisees' response. Thus, the franchisor is the Stackelberg leader. The franchisor has...

...choices. For a given quantity discount schedule, the retailers choose price and service levels that maximize their individual profits.

When the retailers have sufficient power to charge slotting allowances, the game begins with the retailers specifying slotting allowances. Next, the manufacturer announces its optimal wholesale price, w. Finally, the retailers choose their retail price and service levels.

Our modeling of the...4)

(Mathematical Expression Omitted) (5)

(Mathematical Expression Omitted). (6)

Equation 1 gives the franchisor's total profit from the product-specific pricing scheme. The Constraints (in Equations 2-5) insure that the...

...a given pricing scheme, each franchisee selects the retail price and local service level to maximize its own profit. The condition (in Equation 6) is a set of eight equations that determine the optimal...

...is different across the franchisees, the franchise fee alone is insufficient to extract all the profit from the highest -demand franchisee. Franchisor extracts additional profit from the highest-demand franchisee by charging a positive royalty fee. The

additional profit more than compensates for...Program M3 can be replaced by the closed form expressions in Equation 14.

If the manufacturer charges aggregate prices, it pools all the units sold by a retailer and levies w and v on...

...levels ((Mathematical Expression Omitted), (Mathematical Expression Omitted)) as follows.

(Mathematical Expression Omitted). (23)

When the manufacturer uses aggregate wholesale prices, its maximization problem is as follows.

PROGRAM M6

(Mathematical Expression Omitted) (24)

s.t. (Mathematical...greater than) (T.sub.B2). Clearly one of the two franchisees will have (weakly) lower total profits. We assume that the franchisee 2 has (weakly) lower total profits from both products.(6) In terms of Table 1 notation, this implies that H(H...

...is higher under the aggregate pricing. Even when z (greater than) (z.sub.A), under aggregate pricing, the channel profit from product B is higher but the channel profit from product A may not be...

...compensate for less profit from product A. In other words it is possible that the total channel profit from both products may be higher even when the additional condition z (greater than or...develop the chain and not be content with merely selling more franchises. Therefore, a higher total channel profit may increase the attractiveness

of the franchise chain to potential franchisees in future. For a...

...significantly higher franchise fee in the aggregate structure. In such a case, even if the total channel profit increases under aggregate fees, the franchisor may not be able to gain significantly from it and the benefits of higher total channel profit may go primarily to franchisees. To see the argument, one can think of one product...earns a weakly higher profit under program M3 (product-specific pricing) than under M4 (aggregate pricing). In other words, the manufacturer does not gain anything by aggregating sales across products. The reason for this comes from...

...positive franchise fee, its profits from product-specific fees are always weakly higher than its profits from aggregate fees.

Slotting Allowances

When the retailers have enough power to charge a slotting allowance to ...

...the retailers charge slotting allowances, the manufacturer is indifferent between using aggregate and product-specific prices.

PROOF

When the manufacturer uses product-specific prices, the retailer i charges slotting allowances (Mathematical Expression Omitted), where the superscript

denotes optimal values...

...and the manufacturer earns zero profit in the equilibrium. By the same reasoning, when the manufacturer is using aggregate prices, the retailer i charges slotting allowances (Mathematical Expression Omitted), where the superscript - denotes optimal values...

...utilities in Adams and Yellen (1976) under which pure bundling is more profitable to the manufacturer. However, aggregate pricing differs from bundling in several important ways. First, traditional bundling focuses on bundling from a...

...in the same quantities by bundling, the franchisor profit will be less than the franchisor profit under aggregate pricing. In other words, bundling necessarily involves aggregate pricing but aggregate pricing is a weaker...Expression Omitted) (A16)

(Mathematical Expression Omitted) (A17)

(Mathematical Expression Omitted) (A18)

In this case, the total profit of a franchisee from both products is important in deciding which participation constraint is binding ...

...Omitted) and (Mathematical Expression Omitted), (A28)

for i = A, B and j = 1, 2.

The total channel profit (Mathematical Expression Omitted).

The coordinated or channel optimal prices and services are determined by:

(p...

...2 has lower demand for product B. We also assume that franchisee 2 has lower total profits from both products than franchisee 1.
(Mathematical Expression Omitted) (A30)
With the product-specific pricing...

...sub.A1), (T.sub.B1) (greater than) (T.sub.B2) and franchisee 2 has lower total profits for a given set of aggregate royalty and franchise fee. Therefore,
(Mathematical Expression Omitted). (A32...Expression Omitted) under aggregate fees.
(Mathematical Expression Omitted). Q.E.D.
NOTES
1. If the manufacturer uses only wholesale prices, product-specific prices are strictly more profitable than aggregate prices for the manufacturer. Details of this analysis are available from the authors.
2. This is only a representative...

19961200

? t s9/7/54

9/7/54 (Item 17 from file: 148)

08911152 Supplier Number: 18515414
The chemistry of profitable pricing: formulating margin-management solutions. (includes related articles on successful pricing, convincing consumers, and price shopping tips)(Cover Story)

Johnson, Walter E.
Do-It-Yourself Retailing , v170 , n6 , p41(8)
June , 1996

Text:

CHOOSE ANY ITEM IN YOUR STORE, SAY A POPULAR CORDLESS DRILL. NOW, ASK YOURSELF, "WHAT IS THE 'RIGHT' PRICE I SHOULD BE CHARGING FOR THIS ITEM?" UNFORTUNATELY, THERE IS NO 'RIGHT' ANSWER TO THIS QUESTION.

According to Vista Marketing and Sales Information Services, Rolling Meadows, Ill., 1,250 different independent retailers sell the same top-selling cordless drill for 129 different prices ranging from $124 to $188. Obviously, the "right" price is not the U.S. average of $141.

In fact, there is no source where you can look up the correct answer. Even your wholesaler's suggested price is only a starting point. Every item's price should be based on local consumer demographics, competition, a store's product assortment and many other factors.

The most difficult piece of information to gather in trying to set good prices, and perhaps the most important, is how much the competition is selling it for. But while it is easy to check the price of one item, few retailers have the time to check the prices on the 20,000 or more products they stock.

However, Do-It-Yourself Retailing has discovered that you can greatly improve your ability to price effectively by price shopping only 500 items. Even time-constrained store managers can find the hours needed to complete this project. This strategy is based on carefully developing a list of items; you can use the information to help effectively price all the items in your store.

As one retailer says, "The goal of shopping these 500 items is not just to come back and change the prices on those items. That approach does not provide enough benefits for its cost.

"Rather, with a well-thought-out list, you can return from your competitor's store armed with enough information to help you develop a complete competitive pricing strategy for your entire assortment."

Rod Wagoner, retail services director at the Kruse Company, says, "Which items to be shopped is as important as how many items will be shopped."

So how does one begin to develop this list of 500 items that will have far-ranging benefits? Choosing the products for the list will be different in every store, but the process is the same for all. Start with a review of all the elements that go into setting prices:

* understanding your profitability goals;
* focusing on the number and size of transactions;
* merchandise assortment factors;
* competitive climate;
* an item's price sensitivity;
* price points.

PROFITABILITY GOALS

Wagoner says one of the first steps in developing a pricing program is for retailers to review their profitability goals.

Keep in mind that it is possible for independent home improvement retailers to financially withstand the pricing pressure exerted by mass merchandisers and big-box retailers.

While there is no "right" average gross margin to maintain, many hardware retailers report they can maintain a good price image while earning a 37 percent gross margin. Other successful retailers have storewide margins that are higher or lower, but the fact that stores are having success with 37 percent margins is important.

According to the National Retail Hardware Association, the average U.S. hardware store earns this same 37 percent gross margin. These results

show that most retailers can compete.

However, there are many ways to reach a gross-margin target.

Wagoner points to his company's store, Powell Trustworthy Hardware in Powell, Ohio, as a perfect example. "We have gone from having one of the worst-priced stores in the market to having one of the most competitively priced stores in the market," Wagoner says.

Before, the store generated 37 percent gross margins. After repricing the entire store, storewide gross margins remained 37 percent. But with increased traffic and larger sales, gross margin dollars are climbing.

Another retailer who has seen dramatic results from concentrating on pricing invited Do-It-Yourself Retailing to comb through his financial history. While this East Coast retailer prefers to remain anonymous, due to the detail of the numbers we are publishing, the results speak for themselves.

Over a two-year period, his overall gross margins dropped from 40 percent to 37 percent, but his gross profit dollars increased more than $150,000 annually. This feat was the result of 28,000 more customers and the average transaction increasing more than one dollar. (For a complete look at this retailer's approach to pricing, see pages 42 and 43.)

IMPACTING TRANSACTIONS

At both of these stores, however, managers repriced thousands of items. Wagoner says merely changing the prices on blind and price-sensitive items, in most markets, does not position retailers to be competitive. "We believe a pricing program should address all items within a given store," he says.

Developing this type of program may require repricing most of the products in your store. While many retailers will shudder at that thought,

it's manageable if you attack the task systematically.

This store-wide approach focuses on a new pricing strategy's main objectives, which are to increase both the size and number of customer transactions.

Our anonymous retailer says that at the item level, this means every pricing change should be made for one of two reasons: Raising the margin will not decrease velocity or lowering the margin will significantly increase velocity.

CONSIDER ASSORTMENTS

Your pricing strategy must fit your store's focus. For example, Ace Hardware Corp. has developed pricing strategies for five different types of stores:

* convenience hardware stores;
* neighborhood hardware stores;
* super hardware stores;
* home centers;
* contractor-oriented lumberyards.

Robert Mudge, Ace retail services supervisor, says, "Our research clearly shows that consumers' price expectations were different from one store type to another." Recent results from a Russell R. Mueller Retail Hardware Research Foundation study back up Mudge's conclusion. This customer satisfaction study suggested consumers were sophisticated enough to understand the different product, service and price offerings that

various store types offer.

As importantly, Mudge says even within a particular store, departments may need different marketing and pricing strategies.

As an example, he points to lock departments, which many retailers have developed into profitable niches. A retailer pursuing this tactic might want to keep prices low on price-sensitive locks, even lower than price- sensitive items in other departments. The profits from the category would be built on sales volume with these low-end products. In addition, specialty items could earn strong margins, and a qualified locksmith could add extra profits.

The next important factor to consider is the level of competition. This is best understood by visiting other stores to gain an understanding of their pricing and marketing strategies.

Gene O'Donnell, executive vice president at SERVISTAR Corp., says retailers need to come back from price-shopping trips with more than price information. For example, he suggests looking for merchandising ideas, new products and holes in their merchandise offerings.

Wagoner says, "Look for opportunities where you can develop both new and existing assortments."

CHOOSING THE ITEMS

Which 500 items should you specifically price shop? When developing this list, you need to include:

* products from each of your major departments;
* blind, price-sensitive and moderate-margin items;
* a wide variety of price points.

Among the 500 items, make sure you shop a large sample of items from each of your departments. If you have eight major departments, you will end up with about 60 items from each department. Also, choose products from a wide variety of categories within each department.

If you have a niche in a particular category, make sure you select several items from that area, even if you have to sacrifice a few items in other departments. You should still be able to shop at least 50 items from every department, even with these additions.

PRICE SENSITIVITY

Ace Hardware assigns products one of four levels of sensitivity: price-sensitive, competitive, non-competitive and blind. Distribution America assigns items a price-sensitivity code from one to eight.

Here's another approach - look at your products as either price-sensitive, blind or somewhere in between, a category we will call moderate-margin items.

When developing your list for one of your departments, select an equal number of price-sensitive products, blind items and moderate-margin products. With 60 items per department, you will end up with about 20 items from each department from each of the three price-sensitivity levels. Overall, you will shop about 160 Rems from each price-sensitivity level. Price-sensitive items are easy to identify, and most wholesalers have lists that can help you develop a list targeted for your market.

Blind items are also easy to identify, and many have specific characteristics. These include products that are:

* unique in their need for extra pricing, handling or assembly time;
* natural add-ons;
* seldom used;

* repair or replacement items;
* items providing luxury or status appeal;
* not seasonal;
* recreational items; and
* not found in grocery or discount stores.

PRODUCT COSTS

In each price-sensitive level within each department, price shop several different price points. Our anonymous retailer suggests looking at these numbers in terms of your cost, since the final retail prices will depend on the margins you choose. He suggests looking at five price levels, items that cost you:

* less than $1;
* $1-$5;
* $5-$15;
* $15-$35; and
* more than $35.

Using these price points, your list would include four items for every combination of departments, price sensitivity levels and price points. Overall, your list would include 100 items from each price level.

You may have trouble finding products that fit every combination. For example, it may be hard to find price-sensitive plumbing items that cost less than $1. Don't worry; use these guidelines as best you can.

After price shopping this well-constructed list, you will be able to improve your pricing decisions on all the products in your store. Sophisticated statistical analysis might provide the best insights, but you can develop sound conclusions just by looking for trends. Many trends will be readily apparent.

Putting the combinations together, you will know what to do with plumbing products that cost less than $1 and are blind. Don't rely on the three or four products that you price shopped that meet all of these criteria; look at your overall results. According to the results, you will know generally how you should adjust your plumbing items. You will know if you need to make changes to your blind-item pricing. You will know if you have room to increase your prices on items that cost you under $1. In fact, you will have the results from dozens of items in each of these categories.

SETTING RETAIL PRICES

Armed with this data, it's time to make changes. Work your list by department. Our anonymous retailer looked at each of his product categories.

Try to set margins by category, although this may be difficult if there is a wide variety of price points, sensitivity, or private-label and national brands.

Pricing at the item level is time-consuming and demands constant updating. George Lyons, retail programs manager at Cotter and Company, says it is best for retailers to price 2,000 items at the item level. He suggests concentrating on price-sensitive goods. Other retailers with successful pricing plans say while this number may be a little low, they agree that the fewer exceptions, the better.

Mudge also does not recommend heavy use of item-level pricing. He says, "Many retailers use this, but if you are not careful, you lose the relationships that exist between SKUs. A better approach is to set margins for a whole category, look for exceptions and review your prices regularly.

As you set category margins, target exceptions on items that might be giving you a negative price image, such as price-sensitive items, high-ticket items and slow-moving items.

According to a recent survey conducted by Do-It-Yourself Retailing, most retailers, no matter what level of competition they face, earn about 20 percent gross margins on price-sensitive items. However, John Snider, vice president-marketing at Hardware Wholesalers Inc. (HWI), says this number will vary from item to item. "The margins retailers should expect could range from zero or a negative margin to margins considerably above that level," he says.

According to Mudge, retailers should be within 5 percent to 10 percent of the market leader on truly price-sensitive items.

The difference between retailers caught in the crossfire of a big-box market shakeout and those who are insulated from competition in a rural market is the number of items that fall into this category.

According to our survey, there are approximately 2,000 price-sensitive items in markets with warehouse home centers. There are about 1,600 price-sensitive items in markets where the price leader is a regional hardware or home center chain. Even in markets that lack this type of competition, retailers are reporting about 1,400 price-sensitive items.

The numbers in home centers would be slightly higher, due to the increased number of products.

Our anonymous retailer had traditionally set average gross margin of his price-sensitive goods, which accounted for only 4 percent of his profits, at 24 percent. After overhauling his pricing strategy, his average gross margin fell to 20 percent, but increased sales led to $20,000 more profit.

He also adjusted the margins on his high-ticket items. In 1992, he sold only 80 different products that cost him more than $125. These earned a 24 percent gross margin and contributed only 2 percent of his profits. "Since I was making little money with these products, I decided to drop their price to see if I could increase sales," he says. "I had little to lose." After making the changes, he was even able to add 45 new SKUs and eventually generate an extra $9,000 in profit in 1994.

Review your slow-moving products to be sure the only reason they are not selling more rapidly is an inappropriately high price.

Most consultants suggest that you should be within 5 percent or 10 percent on price-sensitive and high-ticket items.

HIGH-VELOCITY GOODS

The biggest opportunity to increase profits is with high-velocity, low-priced goods. Our anonymous retailer noted that the biggest impact will come on items that you sell rapidly. He also targeted items that cost him less than $7.50, since that group of products represented 68 percent of his profits.

He says most wholesalers are not raising margins high enough on these items. Greg Hauca, vice president-marketing at Distribution America,

says many independent retailers are not earning the potential margins on items that retail for less than $15.

However, Hauca says this conclusion comes from looking at this group of products as a whole. He said while a store may be giving away potential profits from this group, there are too many examples in which individual items are so over-priced they have long-term negative impact with customers.

This often can be caused by having financial goals of a department or category that are not in tune with the competitive realities of the marketplace.

The anonymous retailer stresses that retailers should question all of their wholesalers' suggested prices on non-price-sensitive items that cost less than $7.50. "What good does it do me to mark down a bottle of window cleaner from $2.67 to $2.59?" he asks. "My first thought is: 'Why not try it at $2.79?'"

Tom Barfell, regional manager at Hardware Wholesalers Inc., says, "On some items, don't stay with 50 percent margins when you can get more." See page 42 for our case study, which outlines how one successful retailer set his margins.

FOLLOW UP

Once you have worked through one category, see if there is a way to redo the work to reduce the number of exceptions.

If you have raised the margins on many individual items, it may be more efficient to raise the category's overall margin. Then, go back and mark down the few items that should be sold at lower prices.

After completely repricing your store, typically department by department, you will need to communicate your new prices to consumers in your trading area. See page 45 for tips on how to get the word out.

Also, plan on conducting regular, but less comprehensive, price-shopping updates. These forays should target price-sensitive items, as well as specific product categories that can help you fine-tune your prices.

Most importantly, track your results and make sure the changes you have implemented are having a positive impact.

However, don't expect a rapid change, since it will take time before you begin to change your image.

This time delay can create a temporary sag in profits, according to Wagoner. One benefit of crisp pricing is increasing the number and size of your transactions. This impact will not be immediate. As a result, a store must have the sales velocity and strength to withstand this downturn. Don't wait until it's too late to make these changes, he says. Now is the time to take action.

RELATED ARTICLE: Cutting Margins, Raising Profits

A CASE STUDY IN SUCCESSFUL PRICING

At the end of 1992, a retailer on the East Coast looked at his store's performance and his pricing strategies. He began adjusting his prices, and, by the end of 1994, he was experiencing phenomenal success. His sales had increased at a compound annual rate of 14 percent in a local market that was growing at only 3 percent. Despite price pressures from a Lowe's warehouse store about 10 miles away, he was able to maintain a strong price image. While his overall store margins dropped from 40 percent to 37 percent, his gross margin dollars grew nearly 33 percent over his period.

He was able to maintain his overhead expenses, which meant that these additional gross margin dollars went straight to the bottom line in the form of an additional $150,000 in profit. Presented here is his approach to improving his store's price image while taking more money to the bank.

(TABULAR DATA OMITTED)

Price Sensitivity Code	Percent of Sales 1992	Percent of Sales 1994	Average Gross Margin 1992	Average Gross Margin 1994	Percent of Gross Margin Dollars 1992	Percent of Gross Margin Dollars 1994
Price Sensitive	7%	11%	24%	20%	4%	6%
Competitive	35	35	34	30	30	28
Non-Competitive	44	41	44	44	48	47
Blind	14	13	54	53	18	19
Total	100%	100%	40%	37%	100%	100%

(TABULAR DATA OMITTED)

Overall Impact

	Customer Counts	Average Transaction	Total Sales	Total Gross Margin Dollars
1992	136,000	$13.21	$1,793,000	$725,000
1994	164,000	$14.29	$2,349,000	$879,000

Step 1 Segment Your Inventory

This retailer divided his inventory into groups of price points and looked to see how each of these groups was contributing to his store's overall productivity.

Step 2 High-Ticket Items

His first finding was that items that cost him at least $125 were only contributing about 2.5 percent of his total gross margin dollars. He decided that since he was not making any money on these products anyway, he would lower their prices even more to improve his price image. The result was nearly twice as many sales from this group of products, and gross margin dollars increased 62 percent. All these profits were generated while improving his price image. Customers began shopping his store for these items, and he was able to increase the number of products in this category from 80 to 125 items, some with the opportunity for increased margins.

Step 3 Pricing Levels

This retailer then looked at his inventory based on how price sensitive each item was. His computer reports allowed him to divide his inventory into four levels of price sensitivity: Price-Sensitive, Competitive, Non-Competitive and Blind.

Step 4 Price-Sensitive Items

He quickly realized that his price-sensitive merchandise was only contributing 4 percent of his gross margin dollars. He figured it was not much risk to lower these image-making products a little more. The result was an improved price image and an additional $20,000 in gross margin dollars.

Step 5 Margin Opportunity

Initially, this retailer figured to make up for reducing margins elsewhere, he needed to improve margins on other products.

He realized that the most profitable changes he could make were the fast-turning items, since their frequent sales would quickly drive increased profits. He chose to focus on competitive and blind items, where customers would not notice price increases.

He also specifically targeted items that cost him less than $7.50, since these products generated 60 percent of his sales, but would be even less price sensitive.

His computer printouts identified A and B items that met his criteria. He attacked the overall project by working through this fast-moving inventory by product category - such as paint brushes and striking tools. "I could work through a small category in several minutes and could see that I would add several thousand dollars to my bottom line," he says.

Eventually these prices drifted back down as he saw the overall pricing strategy begin working. They ended up settling in around their previous prices. However, he says, don't overlook the opportunity to keep strong margins in these classes of products.

The Results

The goal of an aggressive pricing strategy is to increase sales. If executed properly, it will increase both the size of the average transaction and the number of customers shopping at the store. Most importantly, it will increase the total gross margin dollars the store is generating.

The changes this East Coast Ace retailer made accomplished all three of these tasks.

Market: +6 Margins: -3% Sales: +31% Profits: 21%

RELATED ARTICLE: Convincing Consumers You Offer Good Prices

Recently, a shopper was buying a power tool in an independent hardware store. The manager was proud that his price was a few dollars cheaper than the local big-box store, and he pointed out this savings to his customer.

The shopper apparently did not listen closely, because he misunderstood. He responded, "Oh, don't worry, I know I pay more here, but I enjoy shopping at your store."

This exchange illustrates the challenge independent retailers face in communicating their true pricing. Rod Wagoner, retail services director at the Kruse Company, says this communication challenge is often more difficult than actually determining the proper prices.

In his store in Powell, Ohio, Wagoner uses Distribution America's slogan "Priced Right Everyday" on banners and other promotional materials. SERVISTAR suggests retailers adopt a pricing strategy it calls "Everyday Value Pricing."

These types of marketing strategies, which can he used both within the store and in advertising, reinforce your value and price image.

Product merchandising within the store should also communicate low pricing. John Snider, vice president-marketing at Hardware Wholesalers Inc., says, "Bulk or mass displays, promotional endcaps and other merchandising techniques can be very effective in communicating the low-price image."

Aggressive pricing strategies tend to cut margins on price-sensitive items, which may have an impact on a retailer's advertising tactics. Gene O'Donnell, executive vice president at SERVISTAR Corp., says retailers can no longer advertise an item that has an everyday retail of $19.99 for $7.99 in a circular.

He says this type of ad builds distrust with the consumer and will lead to them only visiting when items they want are on sale. He says there is still room for circular ads, but with more modest discounts. He says consumers are happy to find sales that mark products down as little as 20 percent.

"Independent stores can't be the everyday low price leader, so they should not try to promote that image," says O'Donnell. However, independent retailers who do offer some great buys can build a stronger price image.

To meet this challenge, Wagoner says, retailers must look for special purchases will allow them to pass on significant savings to consumers. In addition, he says, independent retailers must be willing to mark sale items with extremely low margins.

The concept of having an opening price point in a category is also important to consider. Robert Mudge, Ace retail services supervisor, says, "If the lowest price point you have on a paint tray kit is $7.99, and Home Depot has an endcap of these at $3.99, you have an image problem. Regardless of the quality you offer, many customers want the 'cheapie.'"

Snider says that as part of a tactical advertising plan, retailers should also consider a targeted direct-mail approach with current customers. He says this approach can also be developed into some type of frequent-shopper program.

Snider says, "For perhaps 15 percent of consumers, price means absolutely lowest price. For larger segments of consumers, however, price actually means value. Value has, as one of its primary components, price, but also consists of things such as convenience, safety, integrity, quality, the ability to get advice if needed and the need to save time."

Make sure you understand what local consumers value, and advertise your ability to fulfill these desires.

RELATED ARTICLE: Experienced Price Shopper Offers Tips

In Fort Wayne, Ind., retail members of three different hardware cooperatives have banded together to share the expense of price shopping the competition. These three True Value stores, three Ace stores and 10 Hardware Wholesalers Inc. (HWI) stores are paying someone to price shop their chain competitors.

Originally, the group only included HWI retailers, but it was expanded to help make the program more financially stable. For $20 each month, the members receive the prices three of their chain competitors charge for 50 different items. The chains shopped rotate between Furrow (Payless Cashways), Builders Square, Lowe's and Meijer (a regional discount/grocery chain).

Each month, a committee of these retailers chooses the items to be shopped. One option the group originally considered was price shopping only one department each month, but this concept was rejected. Instead, they shop several items from different departments each month.

Many retailers who have paid to have price shopping done have not been happy with the results. According to a recent Do-It-Yourself Retailing survey, about 1 in 10 independent retailers have paid professionals for price shopping. However, not one said the service was very effective.

The Fort Wayne retailers were not happy with their results either, at first. Some said they could not trust the results. They add that they had

even less confidence in data when the price shopper had to make substitutions because the chain did not stock the identical product. Often, prices appeared to be inconsistent among the chains.

Those problems have been solved by having the manager of one of the participating stores conduct the price shopping. Dave Schneider, manager at HWI Hardware & Paint, says he has an advantage over most other price shoppers. "I have both the product knowledge and the retailing experience needed to provide quality results."

Schneider and other retailers shared the following tips to make your price shopping more effective.

* Try to do about 50 items per trip. Schneider says this is the typical number of items he can price in one hour - the maximum time he likes to spend in a competitor's store.

* Take the time to organize your list. To price shop 50 items in one hour, Schneider says he must organize the products by category and department to make sure that he spends his price shopping time efficiently. The list should include a description of each product along with the manufacturer's model number.

* Print out or carefully write down a list of your items. By having the items on a small piece of paper, Schneider says he only needs to fill in the price next to the items when he is in a competitor's store.

* Take a tape recorder. A tape recorder will allow you to make a detailed note without a lot of writing. This is particularly important when making notes about product substitutions and other discrepancies. It also allows for other notes, such as assortment opportunities or merchandising ideas.

* Provide as much information on substitutions as possible. Make sure

you include manufacturer, model number, color, style and size.

* Try to be inconspicuous. While only a few chain retailers do not allow price shopping, Schneider says it is still best to be discreet.

* Price shop during the store's busiest times. Schneider says this keeps him from being noticed and bothered by employees.

* Look like a customer. Schneider says he sometimes tries to blend in as a contractor with a list. At other times, he looks like a consumer, even going so far as to push a shopping cart or have his wife tag along with him.

* Plan on three hours of work for every 50 items that you price shop. In addition to the hour you will spend in the store, you will need about two additional hours. Prior to your visit, you need to prepare your list. After your excursion, schedule time to review the list and tape. You may also need to return to the competition to wrap up any discrepancies and oversights.

* Spend time identifying products the competition does not stock. These products offer the greatest opportunity for increasing margins.

* Shop discount stores for basic hardware and cleaning supplies. When sending an employee to price shop, have him or her check no more than 10 items. Also, limit these items to one category, and send a detailed list along. "We often send an employee home early or have them come to work a few minutes late if we need to have them price shop just a few items,"

Schneider says.

* Price shop commodity items regularly, and re-check other items when your supplier changes your cost.

* Price shop several departments. Selecting 10 to 20 items by department seems to be the right number. Don't spend too long in one department. If you have not finished your list, or employees are beginning to get suspicious, move to a different department and come back just before you leave.

* If you have trouble finding an item, don't waste time looking for it. Look thoroughly and move on down your list. Go back and ask an employee about your last item.

? t s9/7/51

9/7/51 (Item 14 from file: 148)
Gale Group Trade & Industry DB

09341453 Supplier Number: 19193566 (THIS IS THE FULL TEXT)
Aggregate versus product-specific pricing: implications for franchise and traditional channels.

Desai, Preyas S.; Srinivasan, Kannan
Journal of Retailing , v72 , n4 , p357(26)
Winter , 1996

Text:

INTRODUCTION

Since the pioneering franchise arrangement by I. M. Singer company, this form of channel distribution has grown rapidly and accounted for nearly $246 billions of retail sales in 1992 (Huber, 1993). In particular, the business-format franchising accounts for most of the growth in franchising. In such a format, the franchisor sets up the franchise operations and trains the franchisees in established business practices in addition to lending the brand name, product and service. The franchisor collects an up front franchise fee and a royalty based on the actual sales or services by the franchisees. Virtually all franchisees carry multiple products and we

can reasonably expect that the sales potentials for the products are different. For example, a fast food outlet may sell more hamburgers than salads; and an automobile franchisee's sales of the muffler service may exceed that of the brake service.

If the sales potential of each product is different, we may expect that the franchisor may set different franchise and royalty fees for different products. Intriguingly, the prevalent practice is that the franchisor charges one franchise fee and royalty fee for all the products offered by the franchise. We refer to this practice as aggregate pricing.

The puzzling practice of an aggregate pricing scheme may well be due to the inability of the franchisor to accurately gather data on sales of each product from each franchisee on a periodic basis. Often, franchisor supplies raw materials to the franchisees and hence may have accurate information on franchisees' sales of each product. For example, the number of brake jobs done by a franchisee can be inferred by its purchase/usage of the number of brakes. A franchisor can also obtain sales data through frequent and close monitoring of franchisees (Gerlin, 1994). Moreover, advanced information systems frequently used in business-format franchising operations facilitate such sharing of information on a routine basis. It is also possible that a franchisor has one dominant product whose sales are far greater than the sales of other products. In such a case, the franchisor may use fees based on the dominant product.

We offer an alternative explanation for the aggregate pricing scheme. Under certain conditions, we argue, the aggregate pricing scheme may be a logical (equilibrium) outcome. We show that a franchisor facing heterogeneous franchisees can improve channel coordination by using aggregate pricing. The central notion behind our result is as follows. When franchisees differ in the sales potential of a product, the franchisor's optimal offer includes both a royalty and a franchise fee. The use of royalty, however, comes with a cost: it adversely affects the franchisees' retail price and service decisions. The magnitude of optimal royalty and corresponding adverse effects downstream are primarily determined by the heterogeneity across franchisees. The product-specific pricing scheme, therefore, is affected by the differences between franchisees in each

product market. When a franchisor uses aggregate fees, the magnitude of royalty is determined by the overall differences between the franchisees. It is possible that by pooling franchisee demands across products, the difference between them may be reduced. In other words, the difference between two franchisees may be high for a given product, but on aggregate level the two franchisees may be more similar. When the franchisee heterogeneity is more at the product level, but less at the overall level, aggregate fees enable the franchisor to rely more on franchise fee and less on royalty. This shift to a higher franchise fee and a lower royalty benefits the franchisor. It also brings the franchisees' price and service decisions closer to the channel coordinated levels.

In order to highlight the role of franchise fee in the above analysis, we also consider two models of traditional channel in which the manufacturer does not charge a positive franchise fee. In one model we let the manufacturer use a quantity discount schedule, and in the other we allow the retailers to charge slotting allowances. We find that the

manufacturer using quantity discount schedules is always (weakly) better-off with product specific pricing. If the retailers can extract all the surplus from the manufacturer through slotting allowance, then the manufacturer is indifferent between product-specific and aggregate pricing because both structures leave it exactly zero surplus.(1)

Traditionally, vertical relationship literature has focused on the composition of optimal contracts between upstream and downstream parties, especially the use of fixed versus variable components. We also advance this literature by showing that not only the fee structure (franchise fee versus royalty) is important in improving channel coordination, but the basis on which a given fee structure is used (aggregate versus product-specific) can also serve as a channel coordination mechanism.

BACKGROUND LITERATURE

Price and service coordination issues in manufacturer -retailer contexts and similar sales-force moral hazard problems have been analyzed by Spengler (1950), Holmstrom (1979), Basu, Lal, Srinivasan and Staelin (1983), Jeuland and Shugan (1983), Moorthy (1987), Coughlan and Wernerfelt (1989) and Lal (1990).(2) This literature suggests that if the set of admissible contracts is restricted to the franchise fee and royalty, then a contract with franchise fee alone provides the best work incentives to a (risk-neutral) franchisee. Any variable component like a royalty reduces each franchisee's marginal benefits from service (or price), resulting in a lower service (or a higher price). The franchise fee, on the other hand, is a fixed cost to the franchisees, and does not affect its service decision. By charging an appropriate franchise fee, the franchisor can obtain the coordinated service (or price) levels from the franchisees, while leaving acceptable profits to the franchisees. Therefore, the franchisor should not charge any royalty if (downstream) service (or price) coordination is the only potential problem in the relationship.

Another stream of papers (Demski and Sappington, 1984; Maskin and Riley, 1984; Lal and Staelin, 1986; Katz, 1989; Chu and Desai, 1996) considers heterogeneity and agent's hidden characteristics issues in vertical relationships. When the principal cannot discriminate among agents either because of hidden characteristics or because such discrimination is illegal, the principal may have to use a variable component to transfer more revenues from more profitable agents. The use of a variable component does come with the costs described earlier.

Our work differs from these papers in that we consider a multiple franchisees-multiple products case. More importantly, the above research focuses on the composition of the optimal contract. We are primarily interested in the basis (aggregate or product-specific) on which a given type of contract (two-part or one-part) should be applied.

Bundling

Since the seminal paper by Adams and Yellen (1976), several papers have explored the benefits of bundling to a monopolist seller. Adams and Yellen (1976) consider a firm selling two products to two groups of consumers, and show that under certain conditions, if the reservation utilities of two groups of consumers are negatively correlated, the firm may be better-off bundling the two products to the consumers. The practice of aggregate pricing by the franchisors seems similar to bundling. However, it is important to note the difference between the two mechanisms. Bundling involves not only pricing two products together but selling them together

as well. Aggregate pricing does not involve buying/selling two products together. If an auto repair franchisor charged a single franchise fee and a single royalty rate applicable to sales from two products, brakes and mufflers, it is using aggregate pricing. On the other hand, in addition to using aggregate pricing, if this franchisor and its franchisees always sold brakes and mufflers together, they are employing bundling. We highlight other differences between bundling and aggregate pricing, especially the differences in how they work, later in the paper.

The rest of the paper is organized as follows. In the next section, we describe our model and analyze the optimal product-specific and aggregate fees for franchise and traditional channels. We then evaluate the profitability of aggregate fees in franchise and traditional channels. We end with summary and conclusions.

MODEL AND ANALYSIS

Basic Structure

We first consider a franchisor with two products A and B, and two franchisees 1 and 2. The franchisees have exclusive territories, and hence do not compete with each other. The expected demand for the product: i(i = A, B) of the franchisee j (j = 1, 2) is given by:

(d.sub.ij) = (T.sub.ij) - (p.sub.ij) + (s.sub.ij)

where

(p.sub.ij) = the retail price

(s.sub.ij) = the demand-enhancing service of the franchisee

(T.sub.ij) = the market potential.

The demand is linear in price and service, and the effects of price and service are separable. We also assume that the franchisor's profit function has a unique maximum. Chu (1993) and Lal (1990) employ similar demand forms. We assume the marginal cost of service to each franchisee to be (s.sup.2). The marginal cost of inputs for the two products is same and is scaled to zero.

We compare the franchisor's profit under two pricing structures. In the product-specific pricing structures, the franchisor chooses a separate royalty rate, (r.sub.i), and franchise fee, (F.sub.i), for each product. In the aggregate pricing structure, the franchisor specifies an aggregate franchise fee, F, and a common royalty rate, r.

We also consider traditional

manufacturer-retailer relationships under two different pricing arrangements. First we consider a case in which the manufacturer uses a quantity discount schedule consisting of a linear component, w, and a quadratic component, v. Here we compare the manufacturer's profit when it uses a separate quantity discount schedule for each product with its profit when it uses an aggregate quantity discount which applies to the total sales from both products. Next, we consider the possibility that the retailers may have the necessary power to ask for slotting allowances. We assume that the manufacturer accepts any slotting allowance that leave it with non-negative profit.(3) Here also we compare the franchisor's profit under a product-specific pricing scheme, consisting of wholesale prices of (w.sub.A) and (w.sub.B), with its profit under an aggregate pricing scheme consisting

of an aggregate wholesale price of w applied to the total sales from both products.

Game Sequence

In the franchise relationship, the game begins with the franchisor specifying an up front franchise fee (F) and a royalty (r). For a given pricing scheme, each franchisee determines the local price and service level that maximizes its own profit. Thus, the retail price and local service are affected by the pricing scheme. The franchisor recognizes that franchisees' behavior is influenced by the pricing scheme and selects a scheme that maximizes the franchisor's profit, taking into consideration franchisees' response. Thus, the franchisor is the Stackelberg leader. The franchisor has to ensure that a franchisee receives non-negative expected profit from the franchise offer.

In the traditional channels, the game between a manufacturer and its retailers is similar to the above franchise game. When the manufacturer uses a quantity discount schedule, it announces the linear wholesale price, w, and a negative quadratic component, v, keeping in mind the retailers' price and service choices. For a given quantity discount schedule, the retailers choose price and service levels that maximize their individual profits.

When the retailers have sufficient power to charge slotting allowances, the game begins with the retailers specifying slotting allowances. Next, the manufacturer announces its optimal wholesale price, w. Finally, the retailers choose their retail price and service levels.

Our modeling of the franchisor as the Stackelberg leader is empirically motivated. Franchisors typically specify their fees at the time of signing the contract. Franchisees' price and service decisions are based on the terms of contract specified by the franchisor. In a more general channel game, Ingene and Parry (1995) show that quantity discounts, channel coordination or Stackelberg solution may be optimal from the manufacturer's point of view.

Product Specific Schemes in Franchise Channels

We first consider the scheme in which the franchisor selects a product- specific franchise fee and royalty. The optimal product-specific fees (Mathematical Expression Omitted) and (Mathematical Expression Omitted) are the values that solve the franchisor's maximization problem described below.

PROGRAM M1

(Mathematical Expression Omitted) (1)

s.t. (Mathematical Expression Omitted) (2)

(Mathematical Expression Omitted) (3)

(Mathematical Expression Omitted) (4)

(Mathematical Expression Omitted) (5)

(Mathematical Expression Omitted). (6)

Equation 1 gives the franchisor's total profit from the product-specific pricing scheme. The Constraints (in Equations 2-5) insure that the franchisees (1 and 2) do not make a loss on any product. These conditions, known as voluntary participation or individual rationality constraints, are necessary to insure that franchisees participate in the

franchise arrangement voluntarily. We noted earlier that for a given pricing scheme, each franchisee selects the retail price and local service level to maximize its own profit. The condition (in Equation 6) is a set of eight equations that determine the optimal prices and services for all franchisee-product combinations. The set of equations (6) represents the maximization strategy of each franchisee. In turn, the franchisor takes into account the franchisees' behavior while determining the optimal royalties and franchise fees. Therefore, the (p.sub.ij), (s.sub.ij) determined by Equation 6 enter in the franchisor's maximization problem.

The franchisor will extract all the profit above the minimum necessary from the franchisee with the lower profit for a given product. Here a higher demand translates into a higher profit. Thus, for product A, the optimal product-specific pricing scheme (Mathematical Expression Omitted) will yield minimum necessary profit for the franchisee whose demand for product A is lower than the other franchisee. The scheme will yield higher than minimum profit for the franchisee with higher demand. Similarly, for product B, (Mathematical Expression Omitted) will leave just the minimum necessary profit to the franchisee whose demand for product B is lower than the other franchisee.

P1: If (T.sub.i1) (not equal to) (T.sub.i2) (i = A, B), the franchisor charges a positive royalty for the product i. The franchisees' price and service decisions are not at channel coordinated level.

PROOF: See Appendix and Table 1.

The optimal product-specific solution is given in Table 1. When the demand for each product across franchisees is identical ((z.sub.A) = 1 and (z.sub.B) = 1), we can easily verify that optimal royalties are zero. If all franchisees are identical, the franchisor charges zero royalty and transfers all downstream profit through a franchise fee to solve the moral hazard problem. The scheme induces franchisees' to select the channel optimal service level. Any positive royalty will result in a lower service level. The finding is consistent with the well-known result in the moral hazard literature (Shavell, 1979).

When the demand for each product is different across the franchisees, the franchise fee alone is insufficient to extract all the profit from the highest-demand franchisee. Franchisor extracts additional profit from the highest-demand franchisee by charging a positive royalty fee. The additional profit more than compensates for the adverse impact of (higher) royalty on the sales due to lower service input. This is consistent with the standard self-selection literature (Maskin and Riley, 1984).

When the higher demand franchisee's demand is substantially higher than the lower demand franchisee's demand for a product, the franchisor may find it optimal to set the royalty to zero, and charge a franchise fee that exactly leaves the minimum necessary profit to the higher demand franchisee, and gives a loss to the lower demand franchisee. At these levels, the franchisor will have only one franchisee, and the other market will be left uncovered. In our solution, this limit is reached when the optimal royalty equals or exceeds one.(4) We focus only on the case where the franchisor finds it optimal to serve both franchisees. These results are analogous to a case where a firm is serving two groups of consumers with different valuations for the product. The firm's pricing policies are

constrained by the valuations of the lower valuation consumers if it wants to serve both segments.

Aggregate Scheme in Franchise Channels

When the franchisor adopts a pricing scheme with the same franchise fee and royalty fraction across all the products, the optimal fee {(r.sup.*), (F.sup.*)} solves the franchisor profit maximization PROGRAM M2 given below.

PROGRAM M2

(Mathematical Expression Omitted) (7)

s.t. (Mathematical Expression Omitted) (8)

(Mathematical Expression Omitted) (9)

(Mathematical Expression Omitted). (10)

Constraints (given in Equations 8 and 9) ensure that each franchisee gets non-negative profits from selling the two products. Constraint 10 represents the conditions that each franchisee selects the price and service level for the products it sells.

P2: The franchisor charges a positive aggregate royalty if (Mathematical Expression Omitted). The franchisees' price and service decisions are not at the channel coordinated levels.

PROOF: See Appendix and Table 1.

Table 1 gives the optimal aggregate royalty and franchise fee. As in the product-specific case, if the franchisees are identical at the aggregate level, i.e., z = 1, the optimal aggregate royalty is zero. The optimal aggregate royalty increases to a positive value when the franchisees are different at the aggregate level. The reason is same as in the previous case. (TABULAR DATA FOR TABLE 1 OMITTED) When the franchisees are different, the franchisor derives more income from the larger franchisee by using the sales-based royalty fee. That is, the franchisor charges a positive royalty to overcome the inability of the franchise fee to extract all rents from the more profitable franchisee. Note that the franchisee who has lower overall profitability has a higher impact on the royalty, the franchise fee and the franchisor's profit. The reason is that the franchisor has to ensure that this franchisee does not make a loss. In other words, the minimum profit constraint for this franchisee is binding.

When the demand intercepts are such that the optimal royalty in Proposition 2 equals or exceeds one, the difference between two franchisees' profits is so high that the franchisor is better off not serving the lower-profit franchisee. The franchisor does so by setting zero royalty and a franchise fee that just leaves minimum necessary profit for the higher profit franchisee, and leaves a loss to the lower-profit franchisee. Facing such a scheme, the lower-profit franchisee does not participate in the franchise arrangement. We do not consider such cases.

We now derive optimal fees for the traditional channels.

Product-Specific and Aggregate Schemes in Traditional Channels

In this section we turn our attention to the optimal product-specific and aggregate fees for a manufacturer facing heterogeneous retailers in a traditional channel. There are two reasons to examine traditional channels: (1) Since traditional manufacturers typically do not charge a franchise fee, we can investigate if any benefits of aggregate pricing can be attributed to the franchisor's ability to charge a franchise fee; (2) We can study if aggregate pricing is optimal for two other pricing schemes - quantity discounts and slotting allowances. If we find that aggregate

pricing is never optimal in a traditional channel, then our results can provide an explanation for the prevalence of product-specific pricing in traditional channels.

Here we do not allow the manufacturer to use positive fixed fees. In traditional channels, franchise fees are seldom, if ever, observed. In franchised channels, franchisors typically make brand name investments (Lal, 1990) and provide many services such as help in identifying locations, training, developing business formats, etc. to their franchisees. Franchised outlets typically only sell the franchisor's products. Therefore, the franchisor may have enough power to transfer downstream profits through franchise fees. On the other hand, retailers in traditional channels are not as heavily dependent on manufacturers. In addition, manufacturers in traditional channels cannot preclude their retailers from selling competing items. Therefore, they do not have enough market power to extract retailers' rents through positive franchise fee. In fact, retailers may have enough power to ask for slotting allowances and extract profits from manufacturers.(5)

Quantity Discount Schedules

When the manufacturer offers product-specific wholesale quantity discount schedules, the manufacturer's maximization program is M3 below.

PROGRAM M3

(Mathematical Expression Omitted) (11)

s.t. (Mathematical Expression Omitted), for i = A, B and j = 1, 2. (12)

(P.sub.ij), (Mathematical Expression Omitted), for i = A, B and j = 1, 2. (13)

Here w is the per-unit wholesale price and v is the quantity-discount component. Due to the quadratic component, (v.sub.i), the effective wholesale price, (w.sub.i) - (v.sub.i)(d.sub.ij), decreases as the retail level sales increase. Thus, (v.sub.i) represent a quantity-discount to the retailer.

From the retailers' first-order conditions for price and service, we can derive the optimal price and service levels ((Mathematical Expression Omitted), (Mathematical Expression Omitted)) as follows.

(Mathematical Expression Omitted). (14)

The constraint (given in Equation 13) in Program M3 can be replaced by the closed form expressions in Equation 14.

If the

manufacturer charges aggregate prices, it pools all the units sold by a retailer and levies w and v on the total pooled units. The manufacturer's maximization problem in the aggregate case is M4 below.

PROGRAM M4

Max (Pi) = w((d.sub.A1) + (d.sub.A2) + (d.sub.B1) + (d.sub.B2)) -

v(((d.sub.A1) + (d.sub.A2) + (d.sub.B1) + (d.sub.B2)).sup.2) (15)

s.t. (Mathematical Expression Omitted). (17)

(P.sub.ij), for i = A, B and j = 1, 2. (18)

Constraint 18 can be replaced by the following closed form expressions

for the retailers' optimal price and service levels, ((Mathematical Expression Omitted), (Mathematical Expression Omitted)):

(Mathematical Expression Omitted). (19)

RESULT 1

In programs M3 and M4, the retailers always enjoy non-negative profits.

PROOF

With product-specific prices (program M3), the retailer j's profit from product i, ((Pi).sub.ij), after substituting the optimal price and service values from Equation 14 in Equation 12, is ((Pi).sub.ij) = ((((T.sub.ij) - (w.sub.i)).sup.2)/(3 - 4(V.sub.A)) which is always non-negative for any set of parameters which give non-negative prices and services. In the aggregate pricing case, ((Pi).sub.ij) is given by ((Pi).sub.ij) = ((((T.sub.ij) - w).sup.2))/(3 - 4v) which is also non-negative for any set of parameters which give non-negative prices and services.

Q.E.D.

RESULT 1 indicates that addition of the quadratic component, v, does allow the manufacturer to extract more profits from retailers. However, retailers always adjust their prices and services such that for any given quantity discount schedule, they earn non-negative profits.

Slotting Allowances

Here we let each retailer specify a slotting allowance, ((Psi).sub.ij), to the manufacturer. For a given set of slotting allowances, the manufacturer's maximization problem when it uses product-specific prices is PROGRAM M5 given below.

PROGRAM M5

(Mathematical Expression Omitted) (20)

s.t. (Mathematical Expression Omitted), for i = A, B and j= 1, 2. (21)

(P.sub.ij), (Mathematical Expression Omitted), for i = A, B and j = 1, 2.(22)

Each retailer chooses optimal ((Psi).sub.ij) taking in account the above maximization by the manufacturer. The manufacturer accepts a slotting allowance demand, ((Psi).sub.ij), only if (w.sub.i)(d.sub.ij) (greater than or equal to) ((Psi).sub.ij). Solving the retailers' first-order conditions in Equation 22, we can derive the optimal price and service levels ((Mathematical Expression Omitted), (Mathematical Expression Omitted)) as follows.

(Mathematical Expression Omitted). (23)

When the manufacturer uses aggregate wholesale prices, its maximization problem is as follows.

PROGRAM M6

(Mathematical Expression Omitted) (24)

s.t. (Mathematical Expression Omitted), for j = 1, 2.(25)

(P.sub.ij), (Mathematical Expression Omitted) for i = A, B and j = 1, 2. (26)

Each retailer chooses its optimal slotting allowance taking in account the manufacturer's maximization problem M6 and the fact that the manufacturer accepts a slotting allowance demand only if w(d.sub.ij)(greater than or equal to) ((Psi).sub.ij).

The retailers' optimal price and service levels ((Mathematical Expression Omitted), (Mathematical Expression Omitted)) are given as

follows.

(Mathematical Expression Omitted) (27)

RESULT 2

In programs M5 and M6, the retailers always enjoy non-negative profits.

PROOF

Note that the retailers always earn non-negative profits after slotting allowances. Here we consider the retailers' profits before slotting allowances. The retailer j's profit from product i, ((Pi).sub.ij), after substituting the optimal price and service values from Equation 23 in Equation 22, is ((Pi).sub.ij) = ((((T.sub.ij) - (w.sub.i)).sup.2))/3 which is always non-negative for any set of parameters which give non-negative services. In the aggregate pricing case, ((Pi).sub.ij) is given by ((Pi).sub.ij) = (((T.sub.ij) - (w.sub.i)).sup.2)/3 which is also non-negative for any set of parameters which give non-negative services.

Q.E.D.

RESULT 2 shows that the retailers base their price and service decisions on the wholesale price in such a way that for a given set of wholesale prices, they always earn non-negative profits before slotting allowances.

BENEFITS OF AGGREGATE PRICING SCHEME

In this section we analyze the costs and benefits of aggregate fees for franchise and traditional channels.

Franchise Channels

Propositions 1 and 2 show that the optimal fees and profits each structure depends on the differences between two franchisees' demands. We take two possible cases to compare the profitability of aggregate pricing:

1. The same franchisee does not have lower demand for both products, and

2. The same franchisee has lower demand for both products.

CASE 1: Same franchisee does not have lower demands for both products.

Our model considers heterogeneous franchisees who may have different demands for each of the two products. To simplify the exposition we assume, without further loss of generality, that in the present case the franchisee 2 has the higher demand for product A and the franchisee 1 has the higher demand for product B. That is, (T.sub.A2) (greater than) (T.sub.A1) and (T.sub.B1) (greater than) (T.sub.B2). Clearly one of the two franchisees will have (weakly) lower total profits. We assume that the franchisee 2 has (weakly) lower total profits from both products.(6) In terms of Table 1 notation, this implies that H(H.sub.i) = (T.sub.i1) and L(L.sub.i) = (T.sub.i2) for i = A, B.

P3: When the same franchisee does not have lower demand for both products the following results hold:

(a) The retail price and service levels for product B under the aggregate pricing are closer to the coordinated retail prices and service levels.

(b) When (Z.sub.A) (greater than) z (or equivalently (Mathematical Expression Omitted), the retail price

and service levels for product A under the aggregate pricing scheme are closer to the coordinated retail price and service levels.

PROOF: See Appendix.

The left-hand side of the condition in Proposition 3(b) above is a

measure of the heterogeneity across franchisee for product A. The right-hand side of the condition is a measure of the overall difference between two franchisees. Thus this condition requires that the extent of overall heterogeneity across franchisees be less than the extent of heterogeneity for product A.

As discussed earlier, the franchisor, facing heterogeneous franchisees, needs to use both royalties and franchise fees to transfer profits from downstream. However, the royalty component adversely affects retail prices and service levels. When the franchisor uses product-specific fees, its optimal royalty is determined by the differences between franchisees for each product. When the franchisor uses aggregate fees, it is pooling the two products together. Therefore, under aggregate fees, the franchisor's optimal royalty is determined by the extent of overall (pooled) difference between franchisees. In the present case, where a different franchisee has lower demand for each product, the overall difference between franchisees is less than the difference between franchisees for one of the products (product B). Moreover, it is also possible that the overall difference between franchisees is less than the difference between franchisees for the other product (product A). Therefore, the product-specific royalty for B is always higher than the aggregate royalty. When the additional condition (Proposition 3(b)) is also satisfied, the product-specific royalty for A is also higher than aggregate royalty. Thus, for a range of parameters, the optimal aggregate royalty is lower than both product-specific royalties. The lower aggregate royalty reduces the adverse impact on the franchisees' price and service decisions, and bring them closer to the channel coordinated values. The above effect can also be understood by noting the fact the coordinated price and service levels are identical to levels achieved by a zero royalty.

When z (less than) (Z.sub.A), the franchisees' optimal retail prices and services under aggregate price are closer to the channel coordinated levels than those under product-specific prices. As a result, the channel profit from each individual product - the sum of the franchisor's and franchisees' profits from each individual product - is higher under the aggregate pricing. Even when z (greater than) (z.sub.A), under aggregate pricing, the channel profit from product B is higher but the channel profit from product A may not be higher. However, the additional profit from product B may compensate for less profit from product A. In other words it is possible that the total channel profit from both products may be higher even when the additional condition z (greater than or equal to) (z.sub.A) is not satisfied. Our P3 shows that aggregate pricing can help the franchisor improve the channel coordination of retail prices and local service entirely through pricing arrangements. Thus, our results identify a new source of channel coordination mechanism. While previous research has focused on the structure of prices (royalty versus franchise fee) to improve channel coordination, we show that the basis on which a given price structure is employed (aggregate versus product-specific) can be an important mechanism for improving channel profits.

The higher profitability of aggregate prices is especially important for new franchise chains without established track record. When potential franchisees evaluate newer chains, they use the growth of a chain as an indicator of the attractiveness of the investment opportunity. Moreover,

higher channel profits also indicate the franchisor's willingness to develop the chain and not be content with merely selling more franchises. Therefore, a higher

total channel profit may increase the attractiveness of the franchise chain to potential franchisees in future. For a new franchisor, the ability to develop the chain by attracting more and better franchisees is especially important. Our results show the

benefits of aggregate pricing scheme to such franchisors.

P4: The franchisor profit is higher under the aggregate price scheme than under the product-specific price scheme when the following conditions C1 and C2 are satisfied:

(Mathematical Expression Omitted).

PROOF: See Appendix.

The condition C2 ensures that (z.sub.B) is not too large compared to (z.sub.A). Recall that (T.sub.A2) (greater than or equal to) (T.sub.A1) and (T.sub.B1) (greater than or equal to) (T.sub.B2). In our model, the franchisee j's profit from the product i is proportional to (Mathematical Expression Omitted). Therefore, (Mathematical Expression Omitted) represents the difference between two franchisees' profits from product A. Similarly (Mathematical Expression Omitted) represent the difference between two franchisees' profits from product B. Thus, the left-hand side of C1 is a composite measure of the differences between franchisees at the product level. It is easy to see that the right-hand side of C1 is less than 1. Thus, condition C1 essentially requires that the franchisees heterogeneity for product A not be too much lower than the franchisee heterogeneity for product B. In other words, the condition C1 ensures that the demand distributions for two products be comparable.(7) The role of C1 is to restrict the parameters to ensure "comparable" demands for two products. We explain below why this condition is necessary.

The aggregate pricing scheme offers two benefits to the franchisor: pooling of products enables it to charge a higher franchise fee than individual fees, and a lower royalty improves channel coordination of franchisees' price and service decisions. The disadvantage of aggregate fees is that it entails charging the same royalty for both products. When the market potentials of two products are not too dissimilar, the benefits of aggregate fees outweigh its costs. Put differently, if one product's market potential is much greater than the other product's market potential, the franchisor may not be able to charge a significantly higher franchise fee in the aggregate structure. In such a case, even if the total channel profit increases under aggregate fees, the franchisor may not be able to gain significantly from it and the benefits of higher total channel profit may go primarily to franchisees. To see the argument, one can think of one product's market potential to be in dozen of units whereas the other product's market potential to be in thousands of units. Clearly, for such strong differences between products, the aggregate scheme may not serve much purpose to the franchisor. The conditions C1 and C2 restrict the market potentials to rule out very large differences between products.

Our results offer an explanation for the observed practice of aggregate fees. They also show a way to mitigate heterogeneity-related problems in marketing channels. Franchisors facing heterogeneous franchisees have to design franchise offers that leave sufficient profits to smaller franchisees, but give franchisors adequate income from larger franchisees. A variable charge like royalty does help the franchisor achieve this to some extent. We find that charging royalties and franchise fees on aggregate basis can further help the franchisor achieve these conflicting objectives.

CASE II: The same franchisee has lower demand for both products

We now turn to the other possible case of franchisee differences, in which the same franchisee has lower demand for both products. We assume that the franchisee 2 has lower demand for both products: (L.sub.A) = (T.sub.A2) (less than) (T.sub.A1) = (H.sub.A) and (L.sub.B) = (T.sub.B2) (less than) (T.sub.B1) = (H.sub.B). Note that

(Mathematical Expression Omitted), (Mathematical Expression Omitted) and (Mathematical Expression Omitted).

In the previous case, it was possible that the aggregate heterogeneity could be lower than the heterogeneity for each individual product. In the present case, since the same franchisee has lower demand for both products, pooling of products does not reduce the heterogeneity. In fact, the aggregate heterogeneity (z) and aggregate royalty ((r.sup.**)) can be shown to be weighted averages of individual product heterogeneity ((z.sub.A) and (z.sub.B)) and product-specific royalties ((Mathematical Expression Omitted) and (Mathematical Expression Omitted)).(8) Therefore, in this case, pooling of products does not have as strong benefits as in the previous case. As the aggregate royalty is a weighted average of two product-specific royalties, it is higher than one product-specific royalty and lower than the other product-specific royalty. For example if (Mathematical Expression Omitted), (Mathematical Expression Omitted). Therefore, under aggregate fees, the prices and services of one product will be closer to their coordinated values but those of the other product will be farther from their coordinated values. To facilitate the discussion below, we assume that in the product-specific case, (Mathematical Expression Omitted).

P5: When the same franchisee has lower demand for each product, the franchisor profit is higher with product-specific fees.

PROOF: See Appendix.

Under aggregate fees, the prices and services for product A are closer to the coordinated prices. As a result, the channel profits from product A are also higher. On the other hand, the franchisees' price and service decisions for product B are farther from channel coordinated levels. Recall that in the previous case (CASE I), aggregation enabled the franchisor to charge a higher franchise fee. In the present case, pooling of products does not help franchisor charge a higher franchise fee. The reason is that the same franchisee has lower demand for each product. The franchisor's ability to charge a higher franchise fee is limited by demand conditions at the same franchisee under both fee structures. Therefore, the franchisor cannot take any benefit of the increase in channel profit achieved by pooling. As discussed earlier, the optimal royalty under the aggregate fee structure is merely a weighted average of the optimal royalties under the product-specific structure. The franchisor does not

gain by the aggregate structure in any way in the present case.

Traditional Channels

We now examine the benefits of aggregate pricing in traditional channels.

Quantity/Discount Schedules

Comparing the manufacturer's maximization problems for product-specific pricing (PROGRAM M3) and aggregate pricing (PROGRAM M4), it is clear that the manufacturer can always replicate its optimal M4 profit under program M3 by setting (w.sub.A) = (w.sub.B) = w and (v.sub.A) = (v.sub.B) = v. Therefore, the manufacturer always earns a weakly higher profit under program M3 (product-specific pricing) than under M4 (aggregate pricing). In other words, the manufacturer does not gain anything by aggregating sales across products. The reason for this comes from the manufacturer's inability to charge a franchise fee. If it can charge a franchise fee, aggregation may enable it to charge a higher franchise fee and reduce some of the inefficiency in the channels arising from the sales-based components (w and v in this case). In the present case, aggregation does not help manufacturer to reduce the sales-based component and increase the fixed component of its fees. By pooling demands across products, all that the manufacturer achieves is a quantity-discount scheme that that ignores the differences across products, which in turn results in a lower profit. Proposition 6 states the result more formally.

P6: If the manufacturer uses a quantity-discount schedule without a positive franchise fee, its profits from product-specific fees are always weakly higher than its profits from aggregate fees.

Slotting Allowances

When the retailers have enough power to charge a slotting allowance to the manufacturer, they can choose a value of slotting allowance that can transfer all the manufacturer profit without affecting any of the manufacturer's decisions. Therefore, in this case, the manufacturer, in equilibrium, should be indifferent between charging product-specific and aggregate prices.

P7: When the retailers charge slotting allowances, the manufacturer is indifferent between using aggregate and product-specific prices.

PROOF

When the manufacturer uses product-specific prices, the retailer i charges slotting allowances (Mathematical Expression Omitted), where the superscript

denotes optimal values. Any higher value of ((Psi).sub.ij) leaves the manufacturer with a loss and the manufacturer is better-off not selling the product j through the retailer i. Any lower value of ((Psi).sub.ij) leaves the manufacturer with a positive profit without affecting any of its decisions. Therefore, (Mathematical Expression Omitted) and the manufacturer earns zero profit in the equilibrium. By the same reasoning, when the manufacturer is using aggregate prices, the retailer i charges slotting allowances (Mathematical Expression Omitted), where the superscript - denotes optimal values At these values of slotting allowance, the manufacturer again gets zero profit. Therefore, the manufacturer is indifferent between product-specific and aggregate prices.

Note that Propostion 7 compares the manufacture profits under two pricing structures after slotting allowances. It can be shown that the manufacturer profit before paying slotting allowances is always greater

under product-specific prices.(9) Another related issue is that if the retailers have a choice between choosing product-specific and aggregate slotting allowances, which one is better for them? Our analysis (details are available with the authors) shows that the retailers are indifferent between the two choices.

Bundling and Aggregate Pricing

Our discussion of aggregate pricing may seem similar to the traditional discussion of bundling (Adams and Yellen, 1976). In particular,

CASE 1 conditions under which aggregate pricing is more profitable for the franchisor is similar to conditions on consumer reservation utilities in Adams and Yellen (1976) under which pure bundling is more profitable to the

manufacturer. However, aggregate pricing differs from bundling in several important ways. First, traditional bundling focuses on bundling from a manufacturer/retailer to final consumers. Our focus is on the franchisor-franchisee (or manufacturer-retailer) interface. Second, the issues of channel coordination that are responsible for the benefits of aggregate pricing are completely absent in the traditional bundling discussions. Third, aggregate pricing involves pricing two products at an aggregate levels, however, they are not bundled together, and different quantities of the two products may be sold. That is, franchisees or retailers are not forced to buy or sell identical quantities of the two products. It is easy to see that if the franchisees/retailers are forced to buy and sell the two products in the same quantities by bundling, the franchisor profit will be less than the franchisor profit under aggregate pricing. In other words, bundling necessarily involves aggregate pricing but aggregate pricing is a weaker strategy than bundling. Another difference between bundling and aggregate pricing is that aggregate pricing here is profitable only when the upstream party can charge a positive franchise fee in addition to the royalty or wholesale price. When the upstream party does not enough power to ask for a positive franchise fee, aggregate pricing is not more profitable for the upstream party.

In many markets, the distribution of consumer reservation utilities for two products may be such that pure bundling may be more profitable for a seller. Under such conditions, the manufacturer may find it optimal to bundle two products and sell them together to the retailer and the retailer may sell the two products as a bundle to final consumers. In such situations also aggregate pricing may be observed. However, the issues of price and service coordination discussed here are not likely to be relevant in such cases.

CONCLUSIONS

Our results reveal an intriguing aspect of aggregate fees: franchisors can counter some of the adverse effects of heterogeneity among franchisees by using the aggregate fee structure. Thus we offer a possible explanation for the observed practice of franchisors using aggregate fees. We also find that when the upstream firm cannot charge a franchise fee, aggregate fees offer no benefit to the firm, rather it merely results in averaging of prices across products and markets. There may be two other reasons for

franchisors to charge aggregate fees. It is possible that a franchisor may not have data about the sales of each individual product. Franchisors may be collecting sales data at product level for product mix planning and other marketing activities. Moreover, franchise channels are characterized by frequent and close monitoring of franchisees by the franchisors. Such monitoring may also enable the franchisors to collect the necessary sales data to implement a product-specific scheme. Franchisors may also determine the sales of each product from the consumption/usage of the required raw material. A recent article in the Wall Street Journal (Gerlin, 1994) gives coffee sales data for franchise chains such as McDonald's, Dunkin Donuts, etc. Thus it likely that franchisors may have sales data about individual products.

Another possible explanation could be the simplicity of aggregate pricing. For example, if the sales potential for one product is significantly higher than the sales potential for the other product, the franchisor may choose to design the fee structure based on the dominant product's sales. Clearly, in such cases the loss due to ignoring the unique aspects of the other product may not be very high. Though this explanation does explain the use of aggregate fees in franchise channels, it does not explain why aggregate fees are not commonly used in traditional channels.

Recall that our results describe the benefits of aggregate fees when the demand distributions of two products are similar. Therefore, the above explanation in fact complements the explanation that we propose. In particular, when demand distributions of two products are similar, aggregate fees may be an optimal strategy for the franchisors. When the demand distributions are dissimilar (one product significantly dominates the other), aggregate fees may not be a true optimum, but may be very close to the optimum. As discussed above, the losses due to ignoring the smaller product may be very small and the benefits of simplicity may prevail. Thus, our results explain the prevalence of aggregate fees where the simplicity/dominant product explanation may not work. Taken together, they may explain the use of aggregate fees more universally.

The franchisor might consider the alternative of setting high franchise fees and not serving the lowest-demand franchisee. In our model, such a strategy is not profitable for any feasible value of the royalty fraction r (element of) (0, 1). Hence, the franchisor will serve both franchisees. Moreover, even such a screening is unlikely to yield franchisees with identical sales of each product. If the heterogeneity persists, the issues discussed here are valid.

Two possible avenues for further research exist. One is to examine the benefits of aggregation when the products are substitutes/complements. The other is to model the problem in a cooperative framework (Kohli and Park, 1989). We hope to address these issues in future work.

Acknowledgment: We thank the Editor and three anonymous reviewers of the journal for their helpful comments and suggestions. The usual disclaimer applies.

APPENDIX

PROOF Of Proposition 1

PROGRAM M1

(Mathematical Expression Omitted) (A1)

s.t. (Mathematical Expression Omitted) (A2)

(Mathematical Expression Omitted) (A3)

(Mathematical Expression Omitted) (A4)

(Mathematical Expression Omitted) (A5)

(Mathematical Expression Omitted) (A6)

We first obtain the franchisees' optimal price and effort for each product for a given set of ((r.sub.A), (F.sub.A), (r.sub.B), (F.sub.B)}. Since the franchisees' profits are concave in price and effort, their problems can be summarized by the following first-order conditions.

(1 - (r.sub.i))(p.sub.ij)(-1) + (1 - (r.sub.i))((T.sub.ij) - (p.sub.ij) + (s.sub.ij)) = 0, for i = A, B and j = 1, 2. (A7)

(1 - (r.sub.i))(p.sub.ij)(1) - (2(s.sub.ij)) = 0, for i = A, B and j = 1, 2. (A8)

Solving Equations A7 and A8, we get,

(Mathematical Expression Omitted). (A9)

(Mathematical Expression Omitted). (A10)

The program can now be simplified by substituting values of (p.sub.ij) and (s.sub.ij) in Equations Al through A5 and eliminating all constraints in Equation A6.

For a given product i, two relevant demand intercepts ((T.sub.ij)'s) may or may not be equal. If the two demands are not equal for a product, the franchisor increases franchise fee until the franchisee with lower demand gets exactly minimum profit. The franchisee with higher demand will get more than minimum necessary profit after paying all fees. If both demands are equal, then the franchisor charges a franchise fee that leaves minimum necessary profit to both franchisees. If (T.sub.ij) (greater than) (T.sub.i3 - j), we label (T.sub.ij) = (H.sub.i) and (T.sub.i3 - j) = (L.sub.i) for i = A, B and j = 1, 2. Substituting values of (F.sub.A) and (F.sub.B) from the binding participation constraints, the objective function reduces to:

(Mathematical Expression Omitted)

Solving for optimal royalties, we get,

(Mathematical Expression Omitted) (A11)

(Mathematical Expression Omitted). (A12)

Setting (Mathematical Expression Omitted), for i = A, B.

Substituting optimal royalties in the franchisor profit function, we get,

(Mathematical Expression Omitted) (A13)

After substituting optimal royalties in the franchisees' profit functions,

(Mathematical Expression Omitted) and (Mathematical Expression Omitted) (A14)

First note that franchisees' optimal price and service decisions are at the channel coordinated level only if the royalty is zero. From Equations A11 and A12, the optimal royalty is zero only when (T.sub.i1) = (T.sub.i2). We now show that the franchisor prefers to serve only one franchisee for the range of parameters for which (Mathematical Expression Omitted).

For a given product i, if the franchisor serves only the larger franchisee, its optimal policy is to set r = 0 and choose a franchise fee that extracts all the surplus from the franchisee (see Lal, 1990). The franchisor's profit from product i under this strategy is

(Mathematical Expression Omitted). From Equation A13, (Mathematical Expression Omitted). Simple calculations show that

(Mathematical Expression Omitted) and (Mathematical Expression Omitted) if (Mathematical Expression Omitted). It is also easy to verify that (Mathematical Expression Omitted) if (Mathematical Expression Omitted). Q.E.D

PROOF of Proposition 2

PROGRAM M2

(Mathematical Expression Omitted) (A15)

s.t. (Mathematical Expression Omitted) (A16)

(Mathematical Expression Omitted) (A17)

(Mathematical Expression Omitted) (A18)

In this case, the total profit of a franchisee from both products is important in deciding which participation constraint is binding. If for a given {r, F} both franchisees have identical profits, then both participation constraints in Equations A 16 and A17 will be binding. If two franchisees do not have identical profits for a given {r, F}, then the franchisor will charge a franchise fee that leaves minimum necessary profit to the less profitable franchisee, and that franchisee's participation constraint will be binding. The other franchisee will receive

more than minimum necessary profit.

The optimal price and service decisions by franchisees can be described by the following first-order conditions:

(1 - r)(p.sub.ij)(-1) + (1 - r)((T.sub.ij) - (p.sub.ij) + (s.sub.ij)) = 0, for i = A, B and j = 1, 2. (A19)

(1 - r)(p.sub.ij)(1) - (2(s.sub.ij)) = 0, for i = A, B and j = 1, 2. (A20)

Solving Equations A 19 and A20, we get,

(Mathematical Expression Omitted), for i = A, B and j = 1, 2. (A21)

(Mathematical Expression Omitted), for i = A, B and j = 1, 2. (A22)

Substituting these values, franchisee j's profit function is simplified as (Mathematical Expression Omitted), we label (T.sub.Bj) = L(L.sub.B), (T.sub.Aj) = L(L.sub.A), (T.sub.B3 - j) = H(H.sub.B), (T.sub.A3 - j) = H(H.sub.A).

Substituting the value of F from the binding participation constraint into Equation A15, the objective function is simplified as:

(Mathematical Expression Omitted) (A23)

Solving the first-order condition for r gives:

(Mathematical Expression Omitted) (A24)

Setting (Mathematical Expression Omitted), (r.sup.**) = 3(z-1)/(z + 3)

Substituting (r.sup.**) in Equation A23,

(Mathematical Expression Omitted). (A25)

Substituting (r.sup.**) in the franchisees' profit functions,

(Mathematical Expression Omitted) (A26)

Here also the franchisees' price and service decisions are at channel optimal level only when the optimal royalty is zero which is true only when (Mathematical Expression Omitted).

Q.E.D.

PROOF of Proposition 3

For a given level of agrregate royalty r, the prices and service levels for the four products are given by:

(Mathematical Expression Omitted) and (Mathematical Expression

Omitted), (A27)
for i = A, B and 1, 2.
For a given level of product-specific royalty (r.sub.i), the prices and services are given by:
(Mathematical Expression Omitted) and (Mathematical Expression Omitted), (A28)
for i = A, B and j = 1, 2.
The

total channel profit (Mathematical Expression Omitted).
The coordinated or channel optimal prices and services are determined by:
(p.sub.ij)(-1) + (1)((T.sub.ij) - (p.sub.ij) + (s.sub.ij)) = 0, for i = A, B and j = 1, 2.
(p.sub.ij)(1) - (2(s.sub.ij)) = 0, for i = A, B and j = 1, 2.
The channel coordinated retail price and service are therefore,
(Mathematical Expression Omitted) and (Mathematical Expression Omitted), for i = A, B and j = 1, 2. (A29)
Comparison of Equations A27, A28 and A29 shows that if the optimal royalty in the aggregate scheme is lower than the optimal royalty for each product in the product-specific scheme, then the retail prices and local service levels in aggregate price scheme will be closer to their channel coordinated levels. We now show that this is true under the conditions described in Proposition 3.
Consider the case when the same franchisee does not have lower demand for both products. Without loss of generality, we assume that the franchisee 1 has lower demand for product A and the franchisee 2 has lower demand for product B. We also assume that franchisee 2 has lower total profits from both products than franchisee 1.
(Mathematical Expression Omitted) (A30)
With the product-specific pricing,
(Mathematical Expression Omitted) and (Mathematical Expression Omitted) (A31A)
(Mathematical Expression Omitted). (A31)
As (Mathematical Expression Omitted).
Therefore, (Mathematical Expression Omitted). The retail prices and service levels under aggregate price are closer to channel coordinated level.
(Mathematical Expression Omitted)
When condition (Mathematical Expression Omitted) is satisfied,
(Mathematical Expression Omitted). And (Mathematical Expression Omitted).
Therefore, product A retail prices and service levels under aggregate pricing are also closer to the coordinated levels when the above conditions is satisfied.
Q.E.D.
PROOF of Proposition 4
Recall that (T.sub.A2) (greater than) (T.sub.A1), (T.sub.B1) (greater than) (T.sub.B2) and franchisee 2 has lower total profits for

a given set of aggregate royalty and franchise fee. Therefore,

(Mathematical Expression Omitted). (A32)

(Mathematical Expression Omitted) (A33)

((Pi).sup.**) - ((Pi).sup.*) = N/D where

(Mathematical Expression Omitted),

(Mathematical Expression Omitted).

Let (Mathematical Expression Omitted) and (Mathematical Expression Omitted). Substituting for (z.sub.A) and (z.sub.B) in N,

(Mathematical Expression Omitted). (A34)

Note that (z.sub.A) (greater than) 1 and (z.sub.B) (greater than) 1. Therefore, each parenthesis except the last is positive

(Mathematical Expression Omitted). (A35)

When (Mathematical Expression Omitted),

(Mathematical Expression Omitted) (A36)

From Equations A34, A35 and A36, when C1 and C2 are satisfied, N (greater than or equal to) 0, and (Pi)(prime) - ((Pi).sup.*) (greater than or equal to) 0.

Q.E.D.

PROOF of Proposition 5

When (T.sub.A2) (less than) (T.sub.A1) and (T.sub.B2) (less than) (T.sub.B1), the franchisor profits under two structures are as below.

(Mathematical Expression Omitted) under product-specific fees.

(Mathematical Expression Omitted) under aggregate fees.

(Mathematical Expression Omitted). Q.E.D.

NOTES

1. If the manufacturer uses only wholesale prices, product-specific prices are strictly more profitable than aggregate prices for the manufacturer. Details of this analysis are available from the authors.

2. This is only a representative list.

3. Generalizing this to a case where the manufacturer expect a positive minimum profit is straight forward and does not change any of our results.

4. Formal proof is given in Appendix.

5. We thank an anonymous reviewer for suggesting these arguments and the slotting allowance and quantity discount cases.

6. Since profits are quadratic in the intercept terms, this means that (Mathematical Expression Omitted).

7. Though the condition C1 looks complex, it is satisfied relative easily. For example, (T.sub.A1) = 50, (T.sub.A2) = 55, (T.sub.B1) = 70, (T.sub.B2) = 60 satisfy both conditions C1 and C2.

8. The weights are proportional to the product-level differences between franchisees.

9. The manufacturer profit before slotting allowances is its profit from a simple wholesale price structure. The details of this analysis are available with the authors.

REFERENCES

Adams, W. and J. Yellen. (1976). "Commodity Bundling and the Burden of Monopoly," Quarterly Journal of Economics, 90: 475-498.

Basu, A., R. Lal, V. Srinivasan and R. Staelin. (1983). "Salesforce Compensation Plans: An Agency Theoretic Perspective," Marketing Science, 4(4): 267.

Chu, W. (1992). "Demand Signalling and Screening in Channels of Distribution," Marketing Science, 11(4): 327-347.

Chu, W. and P. Sesai. (1996). "Channel Coordination Mechanisms for Customer Satisfaction," Marketing Science, 14(4): 343-359.

Coughlan A. and B. Wernerfelt. (1989). "On Credible Delegation by Oligopolists: A Discussion of Distribution Channel Management," Management Science, 35(2): 226-239.

Demski, J. and D. Sappington. (1984). "Optimal Incentive Contracts with Multiple Agents," Journal of Economic Theory, 33: 152-171.

Desai, P. and K. Srinivasan. (1995). "Demand Signalling Under Unobservable Effort in Franchising: Linear and Nonlinear Contracts," Management Science, 41(10): 1608-1623

Gerlin, A. (1994). "How a Jury Decided That a Coffee Spill Is Worth $2.9 Million," Wall Street Journal, September 1, A1.

Holmstrom, B. (1979). "Moral Hazard and Observability," Bell Journal of Economics, 10: 74-91.

Huber, Janean. (1993). "Franchise Forecast," Entrepreneur (January): 72-75.

Ingene, C. and M. Parry. (1995). "Channel Coordination When Retailers Compete," Marketing Science, 14(4): 360-377.

Jeuland, A. and S. Shugan. (1983). "Managing Channel Profits," Marketing Science, 2(3): 239.

Katz, M. (1989). "Vertical Contractual Relations." Pp. 655-721 in Handbook of Industrial Organization, R. Schmalensee and R. Willig (eds.). New York: North-Holland.

Kohli, Rajeev and Heungsoo Park. (1989). "A Cooperative Game Theory Model of Quantity Discounts," Management Science, 35(6): 693-707.

Lal, R. (1990). "Improving Channel Coordination Through Franchising," Marketing Science, 9(4): 299-318.

Lal, R. and R. Staelin. (1986). "Salesforce Compensation Plans in Environments with Asymmetric Information," Marketing Science, 5(3): 179.

Maskin E. and J. Riley (1984). "Monopoly with Incomplete Information," RAND Journal of Economics, 15(2): 171-196.

Moorthy, K.S. (1984), "Market Segmentation, Self-Selection and Product Line Design," Marketing Science, 3(4): 288.

-----. (1987). "Managing Channel Profit: Comment," Marketing Science, 6(4): 375.

Mussa, Michael and Sherwin Rosen. (1978). "Monopoly and Product Quality," Journal of Economic Theory, 18: 301-317.

Spengler, J. (1950). "Vertical Integration and Anti-trust Policy," Journal of Political Economy, 58: 347-352.

Shavell, S. (1979). "Risk Sharing and Incentives in the Principal and Agent Relationship," Bell Journal of Economics, 10(1): 55-73.

? t s9/k/47

9/K/47 (Item 10 from file: 148)
Gale Group Trade & Industry DB

...be price, rather than quantity, setters.
The Channel Dyad
Taking as a parameter the wholesale price, w, set by the manufacturer, the retailer sets final price so as to maximize the profit function
((Pi).sub.R) = (p - w) D(p) - (Phi) (D(p)) (1)
where (Phi) (.) is...

...the retailer's decision-rule and D(p), the manufacturer chooses w so as to maximize the profit function
((Pi).sub.M) = w D(p) - (Psi) (D(p)) (3)
where, assuming that all...to the sensitivity of the retailer's

optimal price to an adjustment in the wholesale price that maximizes the manufacturer's profit. This is the standard measure of the distribution of economic power in the economics literature...

...the manufacturer leads the retailer, without acknowledged distribution services, the manufacturer's choice of the profit-maximizing wholesale price, (w.sup.*), is determined, in part, by a pass-through elasticity, (Eta) = (dp...
...of successive monopolies because the retailer fails to take into account how choice of the profit maximizing retail price would influence the manufacturer's choice of the wholesale price. This externality is the marginal profit featured in (4(prime)), namely, (w - ((Psi).sub.D...D).
Profits for the vertically integrated firm would always be at least as high as total profits in the decentralized structure because the vertically integrated firm can always choose the optimal values...

...price in the vertically integrated structure. To consider the generality of this result, let the manufacturer's profit maximizing wholesale price and corresponding marginal cost be denoted as (w.sup.*) and (((Psi).sub.D).sup.*), respectively. From (2(double prime)) the retailer's profit maximizing price, given the manufacturer's choice of (w.sup.*), is (p.sup.*) = ((Epsilon).sup.*)/(((Epsilon).sup.*) - 1) ((w.sup...

...that maximizes ((Pi).sub.R). By comparison the vertically integrated firm chooses retail price that maximizes the profit function ((Pi).sub.I) = pD(p) - (Phi) (D(p)) - (Psi)(D(p)) so that the profit maximizing price, p(prime), is a function of marginal costs (((Phi).sub.D(prime)) and ((Psi...

...retailer, without acknowledged distribution services, the optimal retail price will generally be higher than the profit maximizing retail price of a vertically integrated firm.

In the following sections, we explore the generality...

...Phi)(D(p,s), s).

The Channel Dyad Solution

Taking as a parameter the wholesale price set first by the manufacturer, the retailer chooses retail price and a distribution service level to maximize the following profit function:

((Pi).sub.R) = (p - w) D(p, s) - (Phi)(D(p,s), s) (9...

...sub.D)) = ((Phi).sub.s)/(D.sub.s) (11(prime))

The manufacturer chooses w to maximize the profit function expressed as follows:

((Pi).sub.M) = w D(p,s) - (Psi)(D(p,s...optimal distribution service level in response to the manufacturer's choice of the optimal wholesale price, given the manufacturer's knowledge of the final demand. Under certain circumstances the retailer's ability to provide... setting their prices, and the retailer does not account for the influence of the final price decision in the manufacturer's optimization. That is, as in the standard case, in setting p the retailer does...

...margin of the retailer and that of the vertically integrated firm corresponding to their respective profit maximizing points as follows:(4)

((Delta).sub.RI) = ((p.sup.*) - (w.sup.*) - (Phi)(D.sup.*)) - (p...of downstream moral hazard, as in the standard case, the vertically integrated firm will earn total profits at least as great as the total profits of the channel dyad. This follows from the fact that the vertically integrated firm always...

...the conclusions of the discussion of vertical integration with the following result.

Result 4: As total profits of the vertically integrated firm exceed those of the channel dyad, the integrated solution always...

...parameter the wholesale price, w, and the distribution service, s, both set first by the manufacturer, the retailer chooses retail price to maximize profit. We emphasize that although the retailer cannot control the manufacturer's choice of s, the...

...of as an agent bound by a contract to take the distribution service from the manufacturer at no explicit cost, delivering it in its entirety to the retail market in recognition of its demand generating...

...manufacturer sets the two instruments, w and s, to induce the retailer to set final price so that the manufacturer's profit is maximized. The manufacturer's profit may be expressed as:

((Pi).sub.M) = w D(p,s) - (Psi)(D(p, s...

...manufacturer views the effect of s and w on the retailer's choice of final price, the manufacturer's profit may be expressed as the following composite function

((Phi).sub.M) = wD(p...the consequences of the demand characteristics is the retailer's sensitivity in choosing optimal retail price in response to the manufacturer's choices of the optimal wholesale price and optimal distribution service level, given the manufacturer...

...that profits of the vertically integrated firm should be at least as great as the total profits of the channel dyad because the vertically integrated firm always has the opportunity to set...

...in the channel dyad and that of the vertically integrated firm corresponding to their respective profit maximizing points as follows:

((Delta).sub.MI) = ((w.sup.*) - ((Psi).sub.(D.sup.*))) - (p(prime) - ((Psi...average cost at (s.sup.*) is greater than the average cost at s(prime), assuming profit maximizing points in the region of rising marginal costs above minimum average cost, then (s.sup...

...pass-through elasticity

((Eta).sub.s) elasticity of retailer's service adjustment in response to manufacturer's adjustment in wholesale price

APPENDIX 2

PROOFS

Section 3. Standard Case

Proof of Proposition 1. By taking the total...p.sup.b) (s.sup.c), where under the assumption of convexity in price and profit maximizing behavior, b (less than) -1, and under the assumption of concavity in distribution service, 0...

19980322

? t s9/k/32

9/K/32 (Item 32 from file: 15)

Text:

In the traditional mass production or batch production environments, a supplier's cost structure can be classified into two categories: (1) fixed costs, which are independent of the...

...be able to reduce their order processing costs. The major benefits, however, come from the supplier's manufacturing cost savings.

Larger orders result in fewer manufacturing set-ups and larger production runs. These savings...

...set-up costs. On the other hand, increased order size results in higher inventory holding costs for the buyer. Therefore, a supplier should compensate the buyer for this extra cost with an attractive quantity discount pricing schedule...

...of product-specific set-up and order processing costs, there is little incentive for a supplier to offer a quantity discount pricing schedule.

Nevertheless, larger orders may still be quite lucrative to a supplier simply because of...
...a buyer to apply the same discount schedule to all the products offered by a supplier, regardless of the unit price of each. In large scale purchasing operations, when there are multiple suppliers, each offering a...PERSPECTIVE

From a supplier's point of view, one of its objectives usually is to maximize total profit. In using the traditional quantity discount model, this is attempted by formulating the optimal discount schedule for each product, thus maximizing the profit generated for the sale of each product. Unfortunately, however, the sum of the quantity discount sales for individual products does not produce an optimal schedule for the supplier's total profit. Further, the optimal terms of the quantity discount schedule are difficult to formulate because one must consider the buyer's EOQs as well as the supplier's fixed costs assigned to each product. In using the business volume discount model, the supplier determines the most favorable discount schedule for the total dollar volume of business, and maximizes profit directly over all the products sold to a given buyer.

A major advantage for the...

...a business volume discount schedule have been requested. Assume also that, at the base unit price level, the supplier wants to achieve a 40 percent profit margin over the net unit cost. Table I lists the example products along with the supplier's unit cost, buyer's forecasted demand, and the unit base price of the products, assuming a 40...Therefore, in this example, although the buyer pays $5,000 more by purchasing the higher priced gizmo 2 from supplier B, the total cost can be reduced by $15,000. This incentive is an advantage not only for the buyer, but also for supplier B by making its higher priced product much more attractive than it would be using a traditional quantity discount model.

SUMMARY...

...1988), pp. 71-79; H.L. Lee and J.J. Rosenblatt, "A Generalized Quantity Discount Pricing Model to Increase Supplier's Profits,"

Management Science, vol. 32, no. 9 (1986), pp. 1177-185; S.A. Lippman...

? t s9/k/9

9/K/9 (Item 9 from file: 15)
ABI/Inform(R)

Text:

...EOQ) which is dependent on the transfer price set by the manufacturing segment. If the manufacturer's setup cost is reflected in the transfer price the setup costs will affect the distribution segment's... else is affected. "But the choice of the transfer pricing method does not merely reallocate total company profits among business units, it also affects the firm's total profits" (Zimmerman, 1997: 197). Managers make decisions to buy and sell based on transfer prices. If ...

...and to evaluate performance. An ideal transfer price operates such that each segment, seeking to maximize its local segment profit, arrives at resource allocation decisions that will maximize company-wide profits. However, conflicts exist because the transfer price that best promotes goal congruence may not be...

...structures and determined that for a firm that sets up decentralized manufacturing and sales segments, profits would be maximized if the manufacturing segment quoted its marginal cost of production to the distribution segment. Hirshleifer...

...the manufacturing segment.
A more recent article bv Garrett (1992), similar to Hirshleifer, emphasized

that profits are maximized where marginal costs of the group are equal to the marginal revenue of the group...

...and distribution segment. Garrett further argues that one should first find how the group can maximize profits and then set a transfer price which motivates each manager to operate at that level... transfer pricing strategy that will motivate the distribution segment to order in quantities that will maximize firm profits.

To make the analysis tractable, some assumptions typical of EOQ and lot size analysis are...

...distribution segment.

The benchmark for an effective transfer price is that each segment, seeking

to maximize its local segment profit, should arrive at resource allocation decisions that will maximize company-wide profits. The total cost for the company is the sum of manufacturing costs, order processing costs, inventory holding...

?